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# CANADIAN LIVE-STOCK JOURNAL.

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

VOL. II.

HAMILTON, CANADA, AUGUST, 1885.

No. 8



HOLSTEIN COW GLENBURINE NO. 8788.

*Owned by Mr. H. M. Williams, of the Hallowell Stock Farm, Picton, Ont.*

## The Holstein Cow Glenburine.

Our engraving this month is a life-like picture of the Holstein cow Glenburine No. 8788 H. H. B., owned by Mr. H. M. Williams, of the Hallowell Stock Farm, Picton, Ont. She was sired by the famous district bull Jacob, whose dam has a milk record of 86½ pounds in a single day, and a butter record of 19½ pounds in seven consecutive days. Her dam, Trijintje, has a milk record of 91½ pounds per day and a butter record of 20 pounds in seven days. She was calved March 20th, 1878, and is therefore in her eighth year.

When we consider that the first pure-bred Holstein importation was made into the United States as recently as 1852 (not taking into account the importation of 1613, etc., which accompanied the early settlers), and that they now number many thousands, we cannot but conclude that there is a substantial reason for their popularity. The first pure-bred Holsteins were exhibited at our leading fairs as recently as 1883. Now there are hundreds of them in the land, and more coming.

The herd of Mr. Williams now numbers more than 50 head of pedigreed animals, which he claims is the largest herd in Canada at the present time, a car load of which will be sent to the Industrial Exhibition, where their admirers from all quarters of the Dominion will have an opportunity of judging for themselves regarding the excellences of this herd without the necessity of making a special visit to Picton.

In the Hallowell herd are two two-year heifers, giving from 30 to 54 pounds of milk per day, and whose butter records range from 8 to 12 pounds in seven days. The stock bull, Sir Archibald No. 3045, H. H. B., at two years and five months weighed 1,550 pounds, though but in working condition; and the three year-old bull St. Lawrence Chief No. 1528, H. H. B., is doing remarkably.

Our readers will remember the sketch of Sir Archibald in the April number of the JOURNAL, and of the cow Nixie L. No. 5155, H. H. B., in the June issue. This cow has made 18 pounds of butter in repeated tests during the past season, while giving from 70 to 76 pounds of milk per day.

It is perfectly amazing that a small country possessing 12,791 square miles, not quite two-thirds the area of Nova Scotia, should produce cows in sufficient numbers to supply the wants of the American continent, especially when there is so great a demand for this dairy breed. It is a wonderful instance of what a small country can accomplish when its energies are concentrated mainly on one object. Long may Hans succeed in keeping at bay the encroachments of the sea from the favorite pasture-grounds of his black and white cattle. The world has not nearly enough of them as yet.

THE next issue of the JOURNAL, or the September number, will be the exhibition number, which, owing to its very large circulation amongst the leading stockmen of the Dominion, will make it an exceptionally good medium for advertising both stock and farm implements. Those desirous of advertising therein will please let us know at the earliest moment, as only a certain proportion of our space can be devoted to this purpose.

## 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, AUGUST, 1885.

SUBSCRIBERS will confer a favor both on themselves and us by bearing in mind that we cannot agree to stop the JOURNAL in any case without all arrears are paid, as we have no possible means of knowing that they wish its discontinuance till we are so notified. It is unreasonable to expect that we shall send it two or three months for nothing, especially when we repeatedly state that no names will be removed from our list unless we are notified to that effect.

SHORTHORN breeders, especially, will be pleased to hear that our English correspondent will commence a series of articles on the Booth cattle, with the September issue. The writer is, we believe, in every way qualified for the work he has undertaken, and we may reasonably expect to have served up to us a rich repast during the autumn and winter months in reference to the great rival families of the Bates tribes. The admirers of the Booths, so strongly antagonistic in the day of battle, will no doubt await with anxious expectation the fresh unfoldings regarding the tribes that Warlabay has given to the world.

THAT we have not yet "attained" in stock-raising should be kept in mind by those engaged in this important industry. We deem that mind which goes to rest satisfied with past attainment as ill-balanced; where the motto is "onward," progress is sure to be made. There have been instances of wonderful achievements in stock-raising years ago which have in some respects never been surpassed, as in the rearing of the "Durham white ox," and the McCombie "Paris group" of blackskins. Yet on the whole there has been a most wonderful advance. For every good animal in the Anglo-Saxon world fifty years ago, we make bold to say that there are a score now. The excellence to be aimed at and which should be kept constantly before the breeder, is not so much the production of a fine beast now and then as a herd of fine animals. To produce this general excellence and uniformity is the peerless attainment which many of us

never reach, although it is within the reach of most persons who are willing to throw their whole soul into the work. Breeding stock of the right stamp is more an acquired than an intuitive art. And yet there are natural qualifications that enable some men to excel some others.

THE editor of the *London Live-Stock Journal* again reminds us that the animal's journey between birth and the butcher must be made as short as possible. "Young, lean, juicy meat," he says truly, "is the want of the age." This class of meat can best be produced by pushing the animals on judiciously from the first. When allowed to grow slowly, and then fattened, we have fat upon fat and lean upon lean, instead of fat and lean nicely blended. Mr. Wm. Stanford, of Charlton Court Farm, Steyning, Sussex, England, has found it profitable to fatten off bullocks at the age of from 15 to 18 months. This might prove an age too early for securing the largest degree of profit in this country, but it is nearer the mark than three years and a half, the average age at which fat cattle usually leave our hands. Sir J. B. Lawes, who measures well his every statement, favors the early maturing of stock intended for the butcher. He says that "as a certain amount of food is consumed every day by an animal for respiratory and other vital functions, it is evident that the quicker the animal is fed for the butcher the less the total amount of food it will consume." While the breeder can assist in the early fattening process, we would advise only a judicious haste in the maturing of animals intended for breeding.

"NO MAN is a competent breeder who fails, through the means at his command, in so crossing upon the ordinary stock of the country as to elevate the standard of vitality instead of lowering it." This fine sentence is taken from our excellent contemporary, the *National Live-Stock Journal*, of Chicago, where it is used in an article bearing upon "business in live-stock." It combats the almost universal idea that native cattle possess an inherent vitality in excess of that of pure-bred, or even high-bred cattle. While the writer concedes that decline in vitality sometimes results from crossing, it is only from *indiscreet* crossing; and he utters a warning note against being carried away by giving that attention to style and color that should be given to health. If breeders who have thus erred in the crosses they have made, are chargeable with inattention with what so vitally affects their material prosperity, how much more seriously have those erred who have not attempted to improve their stock by crossing at all. In the former case judgment has erred in action, while in the latter, judgment has failed to act at all. The writer lays much stress upon the high value that should be put upon an impressive sire, and the advisability of using him as long as serviceable.

IN the annual report of the Hon. J. H. Pope, Minister of Agriculture, he (Mr. Pope) expresses the hope that more care will be exercised in the selection of cattle by the shipper with a view of rendering the trade remunerative. This is but an indirect call to the producer to mend his ways. The reason that the shipper sends so large a proportion of animals not of the highest order, is that a sufficient number of the latter class cannot be obtained. The standard of attainment in cattle rearing is quite too low, although it is raising somewhat. Individuals of a herd that do not give promise of making suitable shipping cattle should be sold young. Animals of the class we refer to will doubtless yield the largest profit at one year.

Indeed, if not of the right class, and not suitable feeders, they cannot well be disposed of too soon. If farmers would go resolutely to work and grade up their cattle, they would very soon have an abundant supply of the choicest animals. Very many of the animals that are now shipped are bought and fed by professional feeders, who cannot get that class of cattle which they would like to obtain. In these days of low prices for grain, it is of immense importance that the trade in live-stock continue to grow, and it is the bounden duty of every cattleman and shepherd to try and produce animals, when producing them at all, of the right stamp.

THE *Chicago National Live-Stock Journal* for June has an excellent article on the "Morals and Amenities of Trade." The ideas of the writer regarding the wrong of suppressing truth, the disclosure of which would be to the seller's present disadvantage, and the guilt of not making reparation when conscious that an advantage has been taken unwittingly, are certainly commendable. He appeals to the sense of honor on the part of stockmen in barter, as a motive power to keep them in moral balance in transacting their business, and lays stress upon the worth of character, and the value to its possessor of a conscience to which violence has not been done. The only exception we take to the article is, that the motive power to which it appeals is on too low a plane. The springs of honor and good character are fed by ducts which flow from the great reservoir of moral rectitude. Is it right that I should do so and so? is the question of questions that should govern and regulate every business transaction in the universe. If it is right, it will be honorable, and to the advantage of true character. To this rule, or we may say law, there are no exceptions. Men may ignore the existence of this law in practice, but never without paying a heavy penalty in the end; if not in the form of pecuniary loss, in a form far more severe. It is very cheering to find one of the leading live-stock journals in the world speaking thus, in an age when reference to morals in practice are too often shut up in churches, and shut out of newspapers as being in very bad taste.

### Let Others Know.

The number of persons who have told the world too much is very large indeed; not too much of what is solid and true, but of what is light as air or false. Truth should never be hidden. In its essence it cannot be destroyed, but it may be hidden or withheld. To hide it when good is likely to result from its proclamation is criminal; to withhold it is high treason to mankind. The world's great storehouse of valuable knowledge has assumed proportions that are simply stupendous, particularly in these latter days. Although the stock is grand that the ages have laid up, who will tell us the extent of that which has been buried with each passing generation? The motives that prompt individuals to hide or to withhold truth may be very various. They may arise from timidity, or from modesty, but oftener from a selfishness that is only more rank than it is hateful.

Farmers can never afford to hide truth, or to keep back knowledge. The calling which is theirs is so many-sided, that no artist can give a fair delineation. It is a labyrinth with chambers so innumerable that scientists even have not moved the ponderous doors of its hidden recesses, to which no avenues have as yet been found. Although the truths of agriculture are no less certain than those of other sciences, if understood, the endless variations which lead from cause to effect, are so complicated that they bewilder and

perplex in many instances the most gigantic minds. With the slipperiness of an eel and the elasticity of air, like the wild man of Godara, they so often refuse to be chained by human agency. Yet some of them have been chained, and it may be that all of them will yield to human power before the world will sicken and die. Many are the facts that have been determined in agriculture beyond the possibility of a doubt.

It is an indisputable fact that certain rotations are advantageous, and that continued cropping without returning anything to recuperate will quite exhaust the soil of the elements of fertility, but oh, the extent of the unknown that lies in the great depths of the unexplored, who can even surmise? Who would not like to know more of the mysterious principles that govern breeding, and who does not hungrily await further revelations regarding the nature of the laws that control the various changes of the weather?

We do not charge patentees with any injustice to the race when they hedge their discoveries with certain rights as an assurance that the discoverer shall be rewarded for his skill. If but one nugget of discovery is chipped from the flinty mass, the man who struck the blow deserves to reap the reward. The benefits of their discoveries often flow through unnumbered channels to the race, and although the patentees may reap a fortune, the world reaps one far larger.

But there are oftentimes facts and methods known and practised by a few, or even by one individual, that are of much service to the race, if these methods were but made public property, through the medium of the press. Sometimes they are withheld by the timidity or modesty of those who practice them. Sometimes because they are not accustomed to write, and occasionally (must we say it), from the selfish fear that the world will be made the wiser, and through the adoption of these methods, in some slight degree, interfere with the profits of the possession of such knowledge.

If there is one individual among the thousands of our patrons who possesses one iota of knowledge which might prove of advantage to his fellows, we would say to him in all earnestness, by all means make it known. A legacy of this nature is a great gift to mankind, and the consciousness of having been the instrument of contributing something to the world's great store of useful knowledge must be sweet indeed. We hope that neither timidity nor natural reticence, nor consciousness of defective expression, nor any other influence shall allow our friends to consign to oblivion one fragment even of useful practice, that would be advantageous for others to know. And we shall fondly hope that no Ananias-like methods of disclosing discoveries or experience shall be adopted—keeping in reserve a part—a course of action that could not be adopted by one of large sympathies.

Farmers usually profit immensely by the interchange of experiences. Even when these experiences are local in their nature much good is done. Thus it is that farmers' clubs in townships even have done an important work, and agricultural institutes may be made a means of imparting very much useful knowledge. Our patrons cannot please us better than by rendering the JOURNAL in a sense one vast farmer's club, at which our agriculturists of all the Provinces shall meet on leisure evenings to interchange experiences and to compare notes.

Some facts may be disclosed that seem of more importance to those who write than to those who read, but they will find their place ultimately in the proper niche of the estimation of men. It is very remarkable

how truly the balances of common sense do their work, and hence there is no fear but that the practice of years will stamp those new disclosures with their true value. On the other hand discoveries that seem of but little account to their possessors may prove of much advantage to the race, and should therefore by all means be given to the world.

### Providing Warmth for Stock.

In an experiment conducted by Prof. Shelton, of the Kansas Agricultural College, last winter, in feeding 10 Berkshire pigs, of which 5 were kept in a warm barn basement and 5 outside, it was found that 2877½ pounds of maize fed to those inside gave an increase of 604 pounds in the weight of the pigs, and 2844 pounds fed to those outside gave an increase of but 478 pounds. During the coldest period the pigs in the barn ate 1086½ pounds of maize and increased in weight 189 pounds, while those in the outside pens 997 pounds and increased in weight but 87 pounds, thus showing that during this period the pigs in the outside pens expended one-half of their feed in defending themselves from the cold.

The loss to our farmers from inattention to the requisites of warmth in keeping stock in our cold Canadian winters is simply enormous, more than most of us have any adequate conception of. It is probably putting it mildly to say that one-fourth of our feed during the cold period in the wintering of cattle and swine is sacrificed on the altar of inattention. The offering that is thus spontaneously given to the elements would very soon fill the country with basement barns to overflowing.

As things are, basement barns cannot be built in very many instances for some years hence; but much, very much may be done in the meantime to mitigate the evil. Every pen or building occupied by pigs or cattle with a floor may be banked with manure as cold weather approaches, as no stable can be kept warm with cold draughts blowing beneath. This must be early removed at the approach of spring, or the floor will soon rot. Every wall so occupied may be lined inside with boards (any kind will do) on the studding, the intervening space filled in with sawdust, or, more simply and sufficiently effective, chaff, or even straw. The objection is that harbors are formed for rats and mice, which may be true, but of the two evils, the rats are surely much the lesser.

The danger from cold seldom comes from above, yet it is necessary to pay some attention to the state of the loft, lest cold currents blow down upon the animals in their stalls.

It is not only very unprofitable to allow animals to suffer from cold, but it is exceedingly inhuman. A farmer travelling, passes a night in a hotel with insufficient covering, while vainly trying to sleep. In the morning he pounces upon the hotel-keeper with the ferocity of a starved wolf, and yet a score of his cattle at home have been lying shivering all the night, with no one but himself to redress their uncomplaining wrongs. And this occurs in the case of the poor animal dependents not one night, but during every frosty night of the slowly passing winter. The awful accumulation of guilt in this one respect higher than the Rockies. It is only overtopped by that Himalayan height of enormity, the unfeeling cruelty that allows whole herds to die of untold sufferings on the storm-desolated ranges of the West. Wake up, ye slumbering embers of humanity in a large-souled nation, and obliterate the guilty stains!

Set to work, ye sturdy farmers, and build basement barns; we do not say build them, if your farms are deeply mortgaged, although Mr. Laidlaw, of "The

Fort," Victoria road, argues that it would pay farmers to borrow money to be expended in making their cattle comfortable, and we feel that, where judiciously expended, his idea is correct. But without borrowing capital a beginning may be made. Stones do not moulder, and these may be gathered at fitting intervals. As is being practised by Mr. Patteson, of Eastwood, they may be brought by the return teams, while conducting many operations of the farm. Sand does not decay; it may be drawn. Lumber sawed one winter, if carefully piled, will keep two or three years. In this way get ready for the work.

In the meantime prepare for the approach of next winter as indicated above. In early autumn make sure that your buildings are made warm. Beware of attending too many exhibitions. These in a very marked degree are making inroads on the farmer's husbandry at a very valuable period of the year. We do not mean that no fairs should be attended. By all means attend one of the large ones, and it may be in your county or township fair; beyond this be chary of the time you spend at them.

There is a natural tendency in the human mind to defer, which seems constitutional; but whatever else is deferred it should not be attending to the comfort of live-stock in winter. The preparation of the building to which we have referred cannot be well done after winter has come; and if not done, a whole winter attended with more or less of privation and consequent loss has to be undergone by the stock. It is well when we can hail the advent of winter in the attitude with which we receive an expected visitor for whose coming we are fully prepared. How much more pleasant such a meeting than being roused at midnight by the knocking of a stranger, whose arrival reminds one of the manner in which stockmen are often surprised by the arrival of the ice-king.

### Colonial Exposition in London, 1886.

We hope that our countrymen are keeping it well in mind that there is to be a Colonial Exposition next year in London, England, simultaneously with an exhibition of American products. Other colonies are at work, and it becomes us to retain the prestige which, time and again, we have secured when competing with the world.

The Legislatures of the respective Provinces will surely do all in their power to encourage those who may be minded, or who may be persuaded, to exhibit.

### Amongst our Friends.

"Am very much pleased with the JOURNAL."—Wm. G. Veale, Braemar.

"I think your JOURNAL the best paper of the kind I have yet seen."—M. Hoover, Cashel.

"I am prepared to venture a glowing prediction for the future of the JOURNAL. I have been minded again and again to write the editor who wields so graceful a pen, and who finds time to put so much personal work upon the JOURNAL, to give expression to my admiration of the talent and energy displayed in its management."—Rev. J. L. Robertson, Cooperstown, Vernango, Pa.

"I wish you every success. Certainly your paper so far has advanced wonderfully."—W. S. Hawkshaw, Glasworth, Ont.

"I am glad to see that the LIVE-STOCK JOURNAL continues to make such rapid progress. It is, in fact, one of the most interesting and valuable agricultural papers to come to my hands, and I think the present number (February) is one of the best you have yet produced. Hope the present year will see as much ground gained as the last one has."—George Hendry (Daily Free Press), Aberdeenshire, Scotland.

"I am very much pleased with the general get up of the JOURNAL. The cuts are really creditable."—Arch. Kennedy, Vernon.

### The Most Remunerative Agricultural Industry—Which is It?

This question can only be answered in a general way, as the natural situation and modifying accidental circumstances have an important bearing on the nature of the reply. Different epochs, too, will very likely evoke answers that may widely vary.

The companion of wilderness life, forty or fifty years ago, would have said that grain-growing was the most profitable of all the agricultural industries, as he sat in his lowly, mud-clinked cabin, enjoying the bright blaze of the big, wood fire after a day of weary toil. Some fifty years hence the farmer, comfortably seated on his steam plough, of a different construction from anything the world has yet seen, may answer in a similar strain, which, however, is not likely to be the case. At the present time the question in these older Provinces admits of but one answer, and that is, growing stock; and of the different lines of live-stock industry, *beef producing* this year unquestionably takes the lead.

Dairy products are much lower than last year, but on this account dairymen should by no means be discouraged, as the lull in the cheese trade may be but temporary, and the low price of our export butter is only what we may expect from its lack of character.

The average price of wheat, the great staple grain, has not been more than 80 cents per bushel since last harvest, and although the prospect of a shortage in the world's crop, particularly in the United States, may raise the price somewhat, with the immense surplus held over, we cannot reasonably look for a very great advance. There is but one opinion amongst our farmers regarding the unprofitable nature of the growth of this great grain staple at the prices of the past season. Other grains that have been shipped have also ruled low, notably barley. We do not look on this state of matters in the grain trade as at all calamitous. If it has the effect in any degree of concentrating the attention of our agriculturists on the importance of stock-production, it will prove a blessing in disguise. If, like the frosts of winter, which by the very sternness of their action suitably prepare the ground for the reception of seed, it but tends to pulverize the tenacious grain-growing notions of the masses and thus prepares them for the germination of the grand ideas that underlie the importance of stock-growing, the results will be happy indeed.

Stock-growing, like an octagonal barn, which has many sides, has many advantages. Even though the returns in a given number of years did not overtop those occurring from grain-growing (we speak of grain-growing for the market), the advantages remain.

1. It is not so liable to sudden changes in market fluctuations. Some years must transpire before there can be a sudden reversal, unless in perishable products, as butter and cheese.

2. The employment of farm hands continues through the winter, usually an advantage to both parties.

3. Virtually no time is lost in marketing the produce, which in some instances absorbs much of the profits.

4. It affords employment to the young people of the household at every season of the year, and of the most interesting character to the inquiring mind.

5. It leads to the adornment of the country, by the retention of shade-trees, and the necessity which it creates for planting these.

6. It tends to produce a more thorough style of farming from the very necessities of the case, where the farms are heavily stocked.

7. It favors the eradication of weeds from the amount of pasture land that must needs be retained.

8. But its crowning glory is the enriching influence it has on the lands. While the grain-growers' capacity for producing lessens every year, that of the stock-growers continually increases. It is not difficult to foresee what the end will be in such a case.

Meat-producing has unquestionably been the most profitable of Canada's rural industries for several years, unless it has been the production of cheese. This year it is undoubtedly ahead, and just about as profitable as in former years. While producers realized on cattle but 5 and 5½ cents per pound live weight, the difference in the value of the grain-fed was more proportionately than that in the prices secured.

The shipping trade in live-stock this year promises to be large. Shippers often say that they cannot make it pay. Never fear, though we have much respect for them we cannot believe that their generosity prompts them to carry on a business for the benefit of Canadian farmers by which they are out of pocket. The returns may be light, but there are returns, and we most sincerely hope for the best interests of all concerned that there will continue to be returns of a most substantial character.

Once stop the shipping trade in stock and we cut the leading artery that bears in upon us a constant flow of English gold. It would not be easy to predict the consequences, but if such were to follow, we would not despair, as the towns and cities of our land will grow at a rate far more rapid than the growth of the rural population, and citizens are great consumers of beef.

We do not imagine that any will dispute the correctness of our assumption that stock-raising at the present time is the most profitable of the rural industries, and that of the departments of live-stock production the making of flesh is to-day ahead. If so, then why not adopt it? Why not get a first-class male and begin the work at once?

There is surely a lurking fear that the business will be overdone. It may, but we do not look for this. The number of our yeomen is so very large who live from hand to mouth, as it were, that they will not adopt a system of agriculture which is at first slow in its returns.

Never fear—you need not hesitate to embark on this inviting sea, where, though the sailing is not always pleasant, the financial haven is so well protected. The storms of fluctuation beat about it for long before they gain an entrance. You need not linger about the gateway of this fair avenue. The crowd will remain outside, and they will be sufficiently numerous to attend to the interests of the grain market.

Our Legislatures cannot be too fully alive to the doing of everything that they can to foster the live-stock industry. It is of national importance. It not only means more money, but more grain grown, and increased revenues. It secures an ever-increasing capacity for production, which is a vital matter. If a stock farm at the end of twenty years is capable of producing one-half more than a grain farm at the end of the same term, it is just one-half more valuable, and hence the country is just to that extent the richer. We cannot complain of our Legislatures in this respect, as they have shown a most commendable willingness usually to attend to measures calculated to advance this great industry.

The practical summing up of the whole matter is this: If convinced that on the whole grain-growing is the most profitable, continue to grow grain; but if satisfied that stock-raising is better, at once set about the work, but please remember that while grain-grow-

ing may have an adverse influence on stock raising, stock-raising never has an adverse influence on grain-growing.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

### Bull for Beef Breeding Purposes.

In the selection of a bull for the purpose of breeding beef and dairy animals, in order to insure complete success, there are certain essential points which must be considered, as has been satisfactorily proved time and again by many of the most experienced breeders.

I know that long-legged, slab-sided animals, with gothic roofed shoulders and long necks, will bring certain ruin on any herd with which they may be brought in contact, and it seems to me that there is scarcely any direction in which a penny-wise and pound-foolish policy is so short-sighted and so disastrous in its results as in the breeding of cattle from an inferior male; and yet there are but comparatively few farmers that do otherwise. Those attempting to breed suitable animals for the production of beef will be the gainers by bearing in mind—

1st. That in all breeds of cattle there are individuals which show a tendency to "breed back" or to produce offspring bearing the marks of their less improved and comparatively valueless ancestors? This clearly proves the necessity of breeding only from animals of the purest blood, whose ancestors for several generations, both male and female, were known to be uniform in all that constitutes excellence.

2nd. That the reproductive germ will stamp upon the animal developed from it the characters of the parent organism: an animal cannot be supposed to transmit to its offspring that which he does not himself possess.

3rd. If certain races and individuals have characters fixed and will transmit and perpetuate them in greater proportion than others, to animals with which they may be crossed, it is of the utmost importance that the sire selected to breed from should possess the most desirable qualities?

4th. If the animal to be selected be a Shorthorn, his purpose being to beget model beef animals, since "like generally begets like," he should be a model beef animal himself, with chest broad and deep, legs short, straight and fine; shoulders broad and level; shoulder blade oblique and well covered, the ribs springing out so as to leave the crops broad, full and well rounded; top line straight from shoulder to rump; skin yielding and mellow, covered thickly with fine, soft long hair: head small on short neck; muzzle clean, eyes full, and withal a mild, expressive countenance.

5th. Perfect developments and a sound and vigorous constitution are the conditions of fertility.

J. WILMOT.

### Our English Letter.

(From our English Special Correspondent.)

The month of June has witnessed in England a slight revival in the value of pedigree-feeding stock, but none in the ordinary "commercial" stores. Meat values are materially affected by the temperature. On the whole they incline upward; but not to such an extent that a close sultry day will not check the rise, and even push prices lower than they have hitherto ruled. And, whereas, June came in with nice rains and a sudden outburst of vegetation, it goes out with cold drying winds, and an appearance that grass is likely to be short. Probably nothing in England has altered during the month its position for the better so much as has good hay. This is distinctly

dearer; and that is more than can be said of any thing else which the farmer has to sell.

The sales of Shorthorns by Mr. Thornton, in the month have been steady, if at a low range of prices, but Shorthorns are still at least as salable as all other varieties of beef cattle; and the classes for them, at summer agricultural shows (which are now in full swing, every week having its fixture), are as numerous as usual, and of fully average merit. Indeed, the yearling heifer, shown from the Havering Park herd, at the Bath and West of England show, at Brighton, is one of the most remarkable exhibition animals of any variety, in the present season. She weighed alive—when a week under 23 months old—14 cwt. 2 qrs. 22 lbs., and with all this flesh she was brisk in her movements and keen in her appetite. There seems no reason why she should not breed as freely as any Shorthorn of her year. Her sire was a Gwynne bull with a pedigree by no means line bred; her dam was of the old Lincolnshire Nonpareil tribe, which goes back to animals held in high local repute before the Messrs. Colling had won pre-eminence for their Shorthorns. This heifer is called Havering Nonpareil 2J. She combines in her veins an infusion of the blood of the Airdrie Duchesses, and of the Telemachus group at Burleigh, with that of the Scotch-bred Shorthorns of Mr. A. Cruikshank—from whom the g. g. dam was obtained. She is thus quite exceptional in her breeding for show-yard honors; for, of late years, by far the largest proportion of prize-winning Shorthorns have been mainly of Booth blood. Havering Nonpareil has indeed some Booth blood, but it comes in indirectly, and in a very diluted condition. She is in fact—like Mr. Outhwaite's Lord Zetland—the bull of Mr. W. Handley's breeding—good evidence to show that the virtue of the Shorthorn blood is not confined to the representatives of one or two herds, but extends to the whole breed. There has been shown a disposition, this season, to institute here what it is believed is an American device *i. e.*, champion prizes at the shows of breeding-stock for "groups of any pure breed of cattle." We believe that although such competitions may provoke a certain kind of interest, they neither, in the long run, benefit the shows nor the students of stock-breeding. In order to do any good, such contests must be impartially and efficiently conducted. At present they are neither. Were the rival groups of cattle to be all made up of animals of one age—*i. e.*, yearling heifers or three-yearling, of either sex—there would still remain the difficulty that it is all but impossible to find men who are equally competent to pronounce opinions on three or four different varieties. As the trials have hitherto been conducted, the groups have not been all of one age. A group of two full-grown bulls with a small calf, has been pitted against a full-grown bull and two yearling heifers; or a very old bull and two full-grown cows; and men who never have bred two out of the three varieties are supposed to be able to weigh up exactly all the merits and demerits of the discordant groups, and to strike a correct balance. As may be supposed, the decisions in these competitions have rather provoked ridicule than respect. There really are, in our modern show-yard system, influences at work which those who regard agriculture as a noble employment for men's fullest powers, would do well to discountenance. Any collection of choice animals of various strains of blood upon terms wherever none gets unfair advantage, is such a valuable opportunity of acquiring trustworthy information that it should not be allowed to be wasted. The chances of comparative examinations, are such as do not recur for twelve months at least. As mat-

ters are managed the show-yards are filled and emptied and the occasion passes away without one single fact of importance having been elicited which can be put on record for future use.

Still, it must be accepted that, in spite of the depression, the summer shows, so far, have been well-sustained, both by the number of persons who visited them and in the number of the entries for prizes. No doubt the fact that the same exhibitors now go over the whole country, and show the same specimens of the more generally cultivated breeds everywhere, forces itself upon one's notice. Exhibiting has become a distinct profession, of which the prizes are very considerable.

By the publication of the Hackney Stud-book, vol. ii., it transpires that a very successful hackney has already won above £1,500 in prizes; and some Shorthorns have put from £300 to £400 into their master's pocket. Of course it will be understood that to get anything like these returns much has to be expended, and more risked. But it accounts for the very high prices asked for animals up to show-mark in condition. Brothers and sisters in blood may be had at half, or even a quarter of the money, in better condition for breeding, if the buyer visits breeders' farms, and buys himself therefrom.

At the local sales lambs of all breeds are fully ten to fifteen shillings per head below last year's prices. The sales of red polled cattle show that good in calf heifers have been obtainable under £25 per head. The sales of Jerseys have been really brisk; better than for any of the beef breeds. Except for very choice young colts and fillies, all the heavy cart-horse varieties are showing a decline. But it is obvious that the sole cause is a want of ready money. For a good foal, a good calf, a good pair of lambs, or anything which does not take one into the top range of prices, whilst it does take one into the choicest blood—is very salable. Even the change of Ministry, which is commonly believed to indicate some change in the attitude of the Government toward foreign stock-breeders, does not make men hesitate here.

At the sale of Lord Braybrook's Shorthorns at Audley End, the best calves were scrambled for. This was because they went at from 60 to 80 guineas, whilst the two and three-year-old heifers of same origin went at three times the money. Probably no one now living ever saw agricultural property in England of every kind in land, buildings, live-stock, so hampered to find a purchaser who can pay "money down."

G.

### Mr. Rennie's Seed Farm.

The name of Mr. Wm. Rennie, of Toronto, the owner of this one hundred and twenty acre silver medal prize farm, is fast becoming a household word in rural homes throughout the entire Dominion. Although he only engaged in the seed business in 1870, in the line of grains, grasses, and tuberous roots, he has come to the front, and his seeds, from the excellence of their quality, are now eagerly sought by farmers of every class, particularly by those of them who are anxious to excel in the character of their products. His trade in seed grains is particularly large. To enable him to keep up the supply a large number of farmers in Markham and Scarboro' and other parts are regularly engaged to produce for his warehouse. These men are no less noted for the superior quality of the produce, which they grow on soils kept scrupulously clean, than for their integrity of character, hence Mr. Rennie is enabled to place upon the market a succession of seed grains of the purest character that is practically unlimited. The supply from other

quarters is similarly produced, as large lots of seeds are grown under contract in various countries of Europe and other lands, and by men who have made a business of growing specialties. For instance, the bulbs come from Holland, the vines from the United States, and seeds of vegetables from Britain, which enables him to keep up a supply of pure seeds that is practically unlimited.

In the busy season—the months of March, April and May—the seed warehouse, situated on the corner of Adelaide and Jarvis streets, Toronto, presents a scene of much animation. To give an idea of the enormous extent of the work done, we may mention that as high as forty tons of seeds of various kinds have been shipped in a single day. Small quantities of seed are sent by parcel-post to any part of the world. Any order of any size whatever, will be filled, which is accompanied by the remittance as stated in the catalogues, which are furnished free. The postage on seeds alone is often as high as \$25 per day.

The debt that a community owes to a thoroughly reliable and enterprising seedsman is very great. Owing to the endless commingling of grains in threshing, through careless sweeping of barn floors, etc., were it not for the painstaking offices of the seed-merchant, we would look in vain for separation amongst our seeds. Our fields would indeed present a strange medley, and men, disgusted with the general confusion reigning everywhere in the vegetable world, would anxiously ply the question, "Where is purity?"

### THE DRIVE OUT.

Our visit to the "Seed Farm" was made on one of those early July days, when our hearts cannot but be elated at the joyful prospect which the earth presents of a most abundant harvest. It is usually so in this happy country in which we live, but particularly so in Markham, where this seed farm is located, within sight of the fruitful domain of the Messrs. Russell & Marsh, both shining lights in the stock lore of our country. Nature has been very bountiful to Markham and its sister township, Scarboro', in the deep clay loam which it has thrown upon their levels, and deposited in layers so deep that the rain of centuries has not sufficed to wash it off the uplands.

Mr. Rennie conveyed us to the farm, some fifteen miles distant from Toronto, and not far from the Yonge-st. road, a duty undergone by him, with, we fear, too oft recurring frequency in these latter days, but this is one of those features attendant upon success, for which it seems no remedy has been discovered, as it would not be a graceful thing to reject that tribute which strangers bring sometimes from foreign lands to lay upon its altar.

Some ten miles from Toronto, and near the pretty village of Thornhill, in the valley, a lovely scene arose to view. A depression, some miles in extent, stretched out before us, which gradually rose on its further side till it culminated in the Ridges, which lay over against the sky twenty miles away, and form the watershed between Lakes Simcoe and Ontario. Beautiful homesteads sat peacefully within the adjoining shades of ornamental tree and forest. The joyful hum of bees arose from the pink alsike meadows. Immense fields of wheat just a little golden, waved in gratitude to the passing breeze. Everywhere the earth had responded bountifully to the labors of the husbandman, and the grateful smell of new-mown hay filled the senses with a satisfaction which was very pleasing. The sun shone brightly in the heavens, benignantly looking down on the abundant labors of the inhabitants of those townships, who were busily engaged in securing the fruits of the earth.

Happy people, we thought, possessing such a country, and happy country possessing such a people.

#### THE FARM.

At the approach of that hour—noontide, which brings a satisfaction to every toiler on the farm such as the fritterer of life never knows, we reached the farm. Lo! yonder is a field of hay composed of the most magnificent mixed grasses, vying with each other in the luxuriance of their growth. The clovers, however, attest their claims as the foremost foragers for those hidden elements of richness that lie deep within the soil. Notably prominent was the large red. This variety the grasses had with one consent appointed to rule over them, and what is strange, very many farmers will not sow this splendid caterer at all.

Some hay was up in well made cocks, some had just fallen by the mower, which at a little distance in the intervening space was followed by the revolving tedder, and stout yeomen following the rake, which had already commenced its work, were putting it up. With ruddy countenances and modest mien three of the sons of our city host were manning the horse working in the hay, feeling happier, without a doubt, than though engaged in trolling amid the Thousand Islands or vainly seeking for contentment amid the unrealities of some sea-shore watering place. It seems the principles of family government are the same the world over and through all time, in the metropolitan city as in the solitary country place: "Train a child up in the way he should go; and when he is old, he will not depart from it."

The hay is cut when the clover is just nicely in bloom. The mower runs smartly from early morning until noon. About mid-forenoon the tedder follows until its work is done, the operator finishing before getting dinner. Then the rake draws it together followed by a sufficient force to have it all in cock the same day. One load thus cured is worth two dried in the ordinary slip-shod fashion, for feeding purposes.

The farm lies in the form of a rectangle, gradually ascending toward the rear, and consists of but three fields and a piece of woodland, ten acres in extent, which is being thinned and sown to mixed grasses with a view to permanent pasture. Flourishing maples line the highway in front and the drive to the dwelling. The lane, beautifully gravelled, leads up one side to the buildings, which are half way back and on the same side. A lane then leads from these across the centre of the farm to the bush, which is on the other side, forward, but not extending to the road. From this lane a nice neat driveway, unfenced, leads through the centre of the two fields in the rear, with open ditches at the sides. So little value does Mr. Rennie place upon fencing material of the established order, that he has quite taken away a number of the original fences, retaining for use only the best of the rails, and using the remainder for firewood. The fences mainly consist of cedar post and stake with rails laid straight, and are very perfect in their construction. We saw miles of this style of fencing during our day's drive through Markham and Scarboro', which adds very much to the beauty of the country. If the growing scarcity of rails but lead farmers generally to adopt a partial system of soiling, the almost universal wail over the decay of our fencing material will, we think with Mr. Rennie, be turned into rejoicing.

The outbuildings are plain and of the less recent order, and are kept neat and clean and tidy, well covered with paint on the outside, and the stables with whitewash within. The barns are in the form of three sides of a square, thus enclosing save in the east front,

a yard piled with rich manure to the depth of several feet. Every implement was in its place and in perfect working order. The grounds around the buildings are being nicely graveled, which adds very much to the comfort of all concerned in a time of wet upon a clay farm. This gravel is drawn at times when other farm work is not urgent.

#### THE GARDEN

comprises about two acres, and is this year tended by one of Mr. Rennie's sons. It is kept faultlessly clean and contains a great variety of produce. In one plot were thirteen different varieties of potatoes, grown mainly for show purposes, but in some instances by way of testing. They are not hilled much, but the soil is frequently stirred about them.

Another plot contained surplus bulbs left over from spring stock, as gladioluses, etc., which at the proper season must make a magnificent show.

Seventy-five different varieties of roses grew in the places assigned them, many of which were coming into bloom. Other plots contained new varieties of wheat and grasses, which were being tested.

It is a cardinal principle with Mr. Rennie to make each of his distinctive operations to pay its way. This garden, besides beautifying the place, is a source of considerable revenue. The prize roots and tubers raised within it have latterly won many of the rewards at the Toronto Industrial Exhibition, and have done excellent service in foreign lands by drawing attention to the capabilities of our country.

The nicely whitewashed picket fence is planted within with Norway spruce. The pickets will be supplanted with wire, which in a few brief years will be hidden by the trees, which very soon form a perfect windbreak. These are also being planted around the smaller enclosures.

Mr. Rennie imports those trees from Europe in immense numbers, and retails them at from two to three dollars per hundred when from 15 to 20 inches high. They are perfectly hardy, resist well the action of snow-drifts, and will grow well in almost any soil. It is better to plant them on an ordinary ridge made with the plough, well tilled previously, and which will drain. For two or three years the ground should be stirred in the spring around them and cleaned, and then mulched with manure. They may be planted three feet apart.

#### THE STOCK.

As Mr. Rennie is aiming principally at growing farm seeds, he only keeps cows enough to supply the wants of the farm, and horses to enable him to work the land, with the exception of colts, of which there are three or four of different ages, very good animals of the Clydesdale type.

More attention, however, is to be given to the breeding of horses, as no less than three Clyde mares and a stallion, all pedigreed and of high individual merit, have just been ordered for the seed farm from Scotland.

But the principles of good farming are the same everywhere, with such modifications as suit the locality. Stock-keeping is essential to success, even in the management of the "Seed Farm." For several years from 28 to 30 head of cattle have been fattened and from 50 to 60 head of sheep, mainly from the produce of the farm. They are bought in the fall and sold in the spring for export. Hitherto this has paid well, although the roots eaten have been charged at \$50 per acre. This year, as there was but one cent per pound between the buying and the selling price, Mr. Rennie has some doubts about the direct return. To ensure a profit there should be a difference of two cents per pound between the buying and selling prices.

For a time the farm had been rented, and as is usually the case, was coming to grief, when four years ago Mr. Rennie took it in hand, and to-day we do not hesitate to pronounce it one of the richest farms in Ontario.

#### THE CROPS.

These were very luxuriant, and faultlessly clean. A war which knows no truce is constantly being waged against weeds, which are rapidly disappearing.

The spring wheat, oats, peas, etc., were abundantly rank, with no traces of excessive overgrowth. The mangolus were strong and well ahead, with the exception of a few drills, which had been left unsown the evening of the drilling, contrary to the usual practice. A heavy shower falling in the night hindered the sowing of them for two or three days, which will just make a difference of nearly one-half in the crop. No sluggard need hope to farm successfully.

The meadows consist of alsike, large red, small red, and white Dutch clovers, timothy, perennial rye grass, Italian rye grass, and meadow fescue. About twenty-four pounds are sown to the acre.

Mr. Rennie never allows work on the farm to drive him, everything is done as nearly as possible at the right time, which is one great secret of the financial success which attends his enterprises.

#### ROTATION.

The rotation practiced is a five years one. The first crop on breaking sod is some kind of grain, the second, roots, accompanied by heavy manuring, and that class of subsoiling which leaves the subsoil where it is most serviceable—below. Then follows wheat, etc., on which grass is sown. The second year of hay, the aftermath, usually consisting of luxuriant clover, is ploughed under.

#### UNDERDRAINING.

The soil consists of pretty stiff clay with a stiffer subsoil to the depth of three feet, below which sand and water are frequently found. In the mains are used six, five, and four inch tile; in the laterals, two inch, but those two-and-a-half inches would be favored. To drain such soil perfectly, the laterals should not be more than twenty-eight feet apart, and in springy ground fourteen feet. About half an acre or less of the spring wheat had been a good deal injured by the clogging of a drain, which had been caused by some growth, as of the fibres of a mangold root, which had penetrated the joints and grown upwards in the drain, and was washed into a dam by the influx of water in early spring. Mr. Rennie has not been able as yet to dispense altogether with surface ditches. In the natural depressions an open furrow is left. This but tends to strengthen our opinion previously held, that in some very hard clay soils we shall never be altogether able to dispense with a few open furrows, however well the land is under-drained, that is, at ordinary distances, notwithstanding the expressed opinion of scientific writers to the contrary. We shall be glad if it turns out that we are mistaken, as we bewail the loss of the fertilizing matters that are borne away in open furrows. They not only rob the land of its fatness, but break the machines and sorely try the temper of the reapers.

#### THE ELEVATOR DITCHING MACHINE.

Although the fame of Mr. Rennie as a reliable seedsman is already borne through many lands; although as a farmer he was considered sufficiently model to entitle him to a silver medal, it is as the inventor of the elevator ditching machine that he will longest be remembered. We have no doubt that long years hence when posterity shall assign to every man his proper position, as assuredly it will, the name of Wm.

Rennie, of Toronto, will rank along with that of Cyrus W. McCormick, whose invention of self binders is to-day bringing so much joy to the jaded harvesters of many climes.

This machine, like every other monument of useful invention, is the result of years of patient thought, and a most discouraging outlay, but we have now no doubt whatever that the day of compensation is at hand.

To satisfy ourselves regarding its capabilities we interviewed Mr. Adam Hood, of Hagerman P. O., Markham, a successful and reliable farmer. He was the first who ran the machine in its perfected form, and has probably done more with it than any other man living. On his own farm Mr. Hood has cut twelve miles of drain with the ditcher, and eight miles for other farmers. With it he has cut 200 rods in a day and placed the tiles. The best that he had ever done in a day by hand was 8 rods.

At an exhibition of machinery in New Jersey, June 15th, 1884, he cut 35 rods of ditch inside of 40 minutes, including the laying open with the plough. On the 3d of May, 1884, at Columbus, Ohio, where six ditching machines competed, Mr. Rennie took an easy first. The interest taken in this contest was very great, and after it was over our successful Canadian was lionized by the enthusiastic Americans, who are manufacturing the machine at Newark in larger numbers than they are being turned out in Toronto.

Mr. Hood assured us that the ditching machine would work in any ordinary soil, wet or dry, hard or soft, except a gravelly soil, which, of course, needs no draining. In wet ground there must be sufficient solidity to bear up the four horses working it. In hard pan it is necessary that one or two hands loosen the earth with the pick, and where stones abound these must be thrown out by one or two assistants. In one day he cut 150 rods of drain from which two assistants threw out seven wagon loads of stones.

Mr. Hood is quite sanguine that in a free soil the machine will cut 200 rods in a day, but Mr. Rennie modestly places the average for a day's work of ten hours at say, 150 rods, on his own farm, where the soil is stiffer, one day with another. The comparison then stands thus: The cost of digging 150 rods with the machine, which requires two teams and the operator—\$6, including board, the cost of placing 150 rods of tiles is \$1.50, which sums up to \$7.50, or 5 cents per rod. In soil of the same class an average ditcher will cut the drain and lay about 7 rods in a day, for which the charge is about 15 cents per rod, and board in addition. The depth of the ditches in the calculation is three feet. In this latter case, charging board at 40 cents per day, the cost per rod is 20½ cents. Difference in favor of the machine, 15½ cents per rod. In other words, by using the machine the ditches will be cut and the tiles put in position at an outlay which would only pay for the board of the work-hand. Or looking at it from another standpoint, allowing the board of the work-hand to pay the wear and tear on machine, and interest on money invested, there is still a clear gain of say, 10 cents per rod in favor of every rod of drain cut by the machine. On the twelve miles of drain cut by Mr. Hood on his own farm the saving thus effected has been the handsome sum of \$384, a sum which, according to Mr. Hood's calculation, has been saved in twenty days of the working of the machine. There is also the happy consideration that the farmer can do the work within himself with the aid of the ditching machine, which will still further reduce the outlay.

Mr. Rennie put out the first ditcher by regular manufacture, October 18th, 1882. It went to Park-

hill. The number sold to date (July 8th) is sixty-nine, of which three or four have gone to the United States.

It is certainly matter for thankfulness that a machine of this nature has been invented. Since Canada has been settled, we have allowed our open ditches to denude the whole country of immense stores of fertility, which have gone to feed the fishes on the Atlantic seaboard. Seated upon the elevator ditching machine, the farmer with his own horses can tear apart the bosom of the earth at a minimum of cost and lay down the little channel courses which so charm the surplus waters, that in a few brief years very many of our yeomen shall have put an eternal check upon the perpetual waste of fertility.

#### THE DRIVE HOME.

From the "Seed Farm" we drove to Mr. Simpson Rennie's, some eight miles distant. It is certainly a beautiful farm, and well worthy of the honors it has received. The mangold drills were as straight as an arrow's course, and everything, even in the minutest details, in exact order, and the crops upon it very fine. A lack of tree-planting along the highway seemed a weak point among so many strong ones.

At this gold medal farm, however, we saw a hedge of Norway spruce surrounding an orchard, which formed a perfect wind-break though but 11 years planted. This hedge, which was a model of beauty, had been trimmed back at nine years and again at ten.

Still homeward bound we called at the very beautiful farm of Mr. George Morgan, of Scarborough, whose out-buildings were simply charming in their neatness, and the fences are unexceptionable. The crops, too, were good, but a meadow that we crossed would stand some more feeding. On the 123 acres comprised in this farm there are 3,500 rods of drain, three feet in depth. Mr. Morgan has reaped a return sufficient to pay the outlay in about two years.

Nightfall, which brought the happy husbandman back to his rest, shut out the vision of this rich region long before we arrived, as all subliminary pleasure seekers do, at the place of starting.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

#### Horse Breeding.

In urging our farmers to breed their mares with more regard to value of the produce, and to its peculiar testing, than is the ordinary custom, we have pointed out the demand in the American market for carriage and saddle horses. The number of these animals purchased every year in Canada by buyers from Boston and New York is only limited by the number to be picked up here. If we do not have to welcome buyers from the wealthy western cities, such as Chicago, it is because in that section of the United States thoroughbred stallions have been used on ordinary mares, and a native supply is at hand to fill the demand of the moneyed classes for horses of neither agricultural nor trotting capacity. The Kentuckians supply Cincinnati, and even Philadelphia, with half-bred horses for saddle and carriage purposes, and it is a most profitable industry for the horsemen of that State. But in the New England States the use of thoroughbred stallions has long been confined to the horses of the few millionaire racing men who breed for the turf, and they have to go elsewhere when looking for an ordinary medium priced half-bred animal, not of trotting pedigree. The reason that Canada is an excellent field for the buyer in search of a gentlemen's horse is that for many years past thoroughbred stallions have been dotted about

the country, not very thickly, it is true, but in sufficient numbers to get us a name for the production of half-bred hunters. All thoroughbred sires are not equally impressive, but we cannot call to mind one that has not left in his circuit some desirable representatives, eagerly snatched up by the caterers for the foreign market, or Canadian hunt clubs. A few that we remember have been able to get good sellers out of any kind of mare; notably Jack the Barber, Predictor, Vicksburgh, Don Juan, and latterly old Terror has done yeoman's service in the ranks, besides siring more racers than any of his predecessors. A little more development in this direction would be attended by correspondingly increased receipts. At the present moment there is a great scarcity of "ride and drive" horses, every sound young horse known to have been got by a thoroughbred sire going off like hot cakes, either to American buyers or to the patrons of the saddle in Montreal or Toronto. We do not say that the breeding of heavy horses is not as profitable an undertaking, and attended with less risk and even a surer demand; but we do say that hundreds of the mares now put to itinerant Clyde or Shire stallions might be put to the thoroughbred sire with a better prospect of success. A cart mare to a cart sire; but if you could avoid an ill proportioned mongrel—that is to say, a low priced colt—do not use the heavy hairy-legged horse upon your ordinary road mare. Grade upwards and put her to the best cross for all general purposes, the thoroughbred or blood sire. We should like to see more of these animals brought into the country; not racing weeds, but sound great strapping sixteen-handers, found a little slow for racing, with the strength and substance to carry a man weighing over 200 lbs. They can be got for less money than they cost as yearlings. The farmers' sons of Yorkshire, and some other counties in England, have all of them a liking for a bit of blood, for they know that if the hit is a lucky one they will be able to sell to some representative of the moneyed class at a high figure, while in any case the colt will be one otherwise available for light agricultural work. Our own young farmers are too often led away by local prejudice to go for speed, forgetting that there is nothing cheaper than moderate speed in the shafts: and that phenomenal speed is seldom attained. There is absolutely no trade value to the minute between the time of a 3½ minute horse and a 4½ minute horse—and the great majority of trotting-bred animals range between those points. Unless maximum speed can be got out of a trotter he is soon relegated to the cheap buggy class, after having been tolerably well ruined in the effort to ascertain his capabilities. But the young farmer can drive—everybody thinks he can drive—whereas the chances are he feels himself anything but an artist in the saddle. Therefore he patronises the trotting sire, and in nineteen cases out of twenty raises a cheap buggy horse not heavy enough for farm work, nor fast enough for the trotting track, and not eligible as a "ride and drive" animal, which will always fetch from \$250 to \$300 for use in a city. Anybody can see in teams coming into our market towns on a Saturday dozens of exactly the mares to put to a thoroughbred sire, and which should be put to him in preference either to a Clyde or a trotting stallion; presuming that it is the owner's desire to make money out of the colt, and to regulate his horse-breeding by the same considerations that affect his choice of this or that wheat, or his preference for one variety of grass seed over another. To emphasize our advice we will endeavor to characterize the mare. She shall be one with no hereditary unsoundness of wind or limb: with well sprung ribs, and a level belly-line; with clean legs and feet; weighing over eleven hun-



dred pounds, possessed of life and stay, and with average quality and good looks to recommend her. The thoroughbred stallion will tone down any superabundant coarseness without at all reducing the weight. He will put a head and neck on the colt denoting courage and generosity, and more than all he will give it withers, while all the good points of the mare are sure to be enhanced. It is owing to the ignorance of facts, and to their consequent neglect of the thoroughbred sire, that the wealthy rank and fashion of the New England States have to-day to depend on Canada and Kentucky to supply them with gentlemen's saddle horses. If the truth of the case were better understood here, there would be fifty half-bred colts produced where there is now only one. In England, on the other hand, the thoroughbred stallion has for two centuries been used promiscuously on all sorts of mares, and there is no country in the world where the average horse is so generally possessed of the good looks and blood-like appearance which—sell!

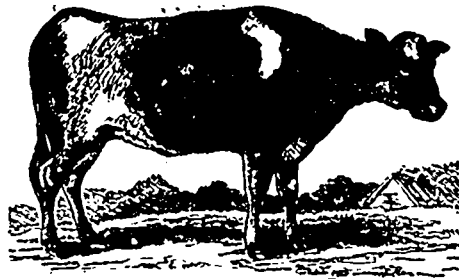
### On British Polled Cattle.

BY R. C. AULD  
(Late of Tillyfour, Scotland).

EDITOR CANADIAN LIVE-STOCK JOURNAL.

On one point only might Mr. McCrae and myself possibly agree, viz.: as to his criticism of my article being a little "mixed." I admit I was rather indignant (and the printer not being familiar with my copy) at an attack quite gratuitously made on the Aberdeen-Angus of a kind which representative Galloway men have always deprecated, but which I have never seen them contradict; nor does Mr. McCrae express regret or allude to the particular libel in question. Hence Mr. McCrae must excuse one for "pitching into" the offender. If Galloway men would have themselves kept hands off the Aberdeens, I should not have said anything about the Galloways; as it is, I refrained for long. The evidence that Mr. McCrae offers is *not* evidence at all. It is such as the authors of it had absolutely no right to have given forth without producing their proofs of its correctness, which they have always utterly failed to do. Mr. Gillespie, who is cited as "evidence," in his Prize Essay on Galloway Cattle, in the Highland Society's Transactions several years ago, declared therein that just previous to the close of last century the Galloway was horned—and he indeed took glory in the fact. Since then Mr. Gillespie, evidently inspired from this side, has, in several controversies, revised this date by saying that "he meant," not the 18th, but the 17th century! which nobody believes except himself and those of his "mixed" imagination. Volume after volume of the same Transactions have since appeared yearly; and this year it is Mr. Gillespie who is the author of the first-rate report of the live-stock department of the last year's Centenary Show, and neither in any of the said yearly volumes, nor in this report, has he, it seems, dared to correct his "mistake," one of such vast importance; though in the controversy lately between himself and the writer, in the London *Live-Stock Journal*, he was publicly invited to do so at the earliest period, by "Verax." The editor of the Transactions would readily admit the correction, for I see several such from time to time—but it has not been made. The reason is evident. Mr. McCrae claims the Galloway as "the oldest polled breed in Britain." This is Mr. Gillespie again, and that gentleman, when charged with having made this assertion, indignantly denied ever having said such a thing—though I gave "chapter and book" that clearly showed that Mr. Gillespie, in this further "denial," had made a further "mistake." Yet this denial of ever having said such a thing that the Galloway was the oldest breed is excellent evidence that Mr. Gillespie does not now believe so, yet Mr. McCrae repeats a statement that has been publicly contradicted. Mr. McCrae "believes" further that the Galloway is "the oldest Polled breed in Europe!" He likes proofs: would he oolge us with *his* proof on this point? Alas! such an agonized claim but too clearly exhibits Mr. McCrae's ignorance. In the work on Polled Cattle, which I expect will appear soon, Mr. McCrae will have ample opportunity of learning the A B C of this part of the subject. I

think it would be no difficult task for me to prove that I know much more of the "ancient" history of the "polled" Galloway than Mr. Gillespie does—have consulted more works on the subject than he knows of. Many of these works—and full extracts of many others—I shall be glad to show to any one who cares to test my "authority." I could fill whole issues with matter proving that I have excellent ground for what I have stated. But in this special point of the Horned Galloway breed, I shall only give one—the late Earl of Selkirk—well known, surely, in Canada—who was most conservatively partial in particular to the cattle of his country, the Galloways—and to old customs, old manners and everything of olden times. His family has for centuries bred Galloway cattle, and he has declared that previous to about 1750 the Galloway was a horned breed. Now this gives a greater antiquity to the "polled" Galloway than Mr. Gillespie himself. As to the Galloway not being a "mixed" breed, I would advise Mr. McCrae to avoid provocation too far. I would *not* really like to produce the evidence I have collected on this point, as I want to do no injury to any breed as long as no provocation is given. Mr. McCrae asks, "Wha were the Galloways like?" I can oblige him. The enclosed block is an exact copy made by Mr. A. M. Williams, author of "Etchings of Famous Shorthorns," an artist to the *Live-Stock Journal*, etc., of a "prize Galloway heifer" at Lord Somerville's show, from a work published in 1805. I make allowances, but there she is.



From the most recent evidence obtained one might come to the conclusion that the Galloway—then of the small Kylee (*Bos longifrons*) species—first began to be polled, from the large infusion of Irish blood into the district at that time—a large number of which were polled Irish—from the old polled breed of that region. But more of this breed in its proper place, when "Polled Cattle" appears. Does Mr. McCrae know that, from the beginning of history, the Buchan breed was the most famed in Scotland and that the earliest known cases of polled cattle in Scotland refer to the progenitors of Aberdeen-Angus?

As to scurs, Mr. McCrae has again regardlessly got on to the ice. All the authors I have consulted refer in large terms to the loose dangling horns of Galloways, etc., not scurs, but *dangling horns*. And I learn, from a prominent breeder of the West, that he has lost thousands of dollars on account of the frequency of scurs in his registered Galloway stock.

Mr. McCrae will no doubt have the results of Mr. Harvey of Turlington's sale before him by this time; not that I am satisfied with this result; for I imagine, though I have not seen the catalogue, that the animals were not all of the highest breeding.

It is from my article only that Mr. McCrae has found the best qualities of the Galloways. That the Galloways are the cattle to starve—miserable ambition—that will never help them to die and dress 71 per cent. of live weight. It is a motto that should be printed in large letters and hung up over every barn door in this country, "If a beast don't pay meat, he won't pay hunger." Higher authority than mine has pronounced satisfactorily on Aberdeens as "rustlers." And then for early maturity and heavy beefing, of the highest quality, the Aberdeens are unapproached and unapproachable, and the more you can pile on to them for exhibition purposes there is no better test or evidence of the capability and utility of the breed in general—proof that the tallow is well stored inside, and well distributed outside—properly furnished for any and all conditions.

As I said, Mr. McCrae has no call to resent, for the reasons I have stated at the beginning. As far as I have taken part in the Galloway question, I was not the first to give offence. It was, and is, Galloway

men; and however much they dislike attacks on their own cattle, I have never seen them repudiating such gratuitous disparagements as have recently been made. My motto would be for breeders, "Live and let live."

P. S.—To give some insight into the controversial methods of official Galloway men, I would request you to publish in your excellent journal the letter signed "Verax," in a recent issue, June 19, of the London *Live-Stock Journal*, headed "Galloway Cattle."

### GALLOWAY CATTLE.

TO THE EDITOR OF THE LONDON LIVE STOCK JOURNAL.

SIR—Although I am very reluctant to afford the slightest justification for a revival of the controversy about the antiquity of the various breeds of Polled cattle, which was thrashed out in your columns a few months ago, there is, I am sorry to say, no alternative left me but to again refer to the subject. The Rev. Mr. Gillespie, who was one of the parties to that discussion, is also, I presume, adviser to the Council of the Galloway Cattle Society; and, I observe that in the report presented to the members of the Society last week the following sentences occur:

During the past year the secretary has again been under the necessity of repelling unfair and disparaging attacks made on the Galloway breed of cattle by two different persons—one of these being made by an old offender in an American newspaper and the other in *The Live-Stock Journal* of London by an Aberdeenshire man, who has emigrated to the United States. In the latter case the representations regarding the history and characteristics of Galloways were so unfair and unfounded as to call forth an effective refutation of them by a correspondent who, though writing anonymously, is understood to be a recognized authority on the history of Polled Aberdeen-Angus cattle.

Now it may be flattering to me as a controversialist to have it stated that it was I who "effectively refuted" the statements of your American correspondent regarding Galloway cattle, and not Mr. Gillespie himself, who certainly wrote several long letters with that object. But I must protest against the manner in which my intervention in the controversy is represented in the paragraph I have quoted. My first letter on the subject was written after several communications had appeared in the *Journal*—from Mr. Auld, Mr. Gillespie, Mr. Euren, and Mr. Gilbert Murray. It is quite true that in the letter that is described as an "effective refutation," I first alluded to Mr. Auld's communication because it was he who had originated the discussion, and because in doing so he had put forward claims on behalf of the Aberdeen-Angus breed, which, in my opinion, as a student of the history of our bovine races, could not be sustained by recorded evidence. I expressed regret that he should have thus weakened an otherwise strong case. I further stated that I believed the Galloways could establish a title to existence as a Polled breed from about 1750, and that they were the breed esteemed by English graziers in the end of the last century. But I did not stop there, as might be concluded from the report of the Council of the Galloway Cattle Society. Indeed, if that had been all I meant to say it is very likely that I should not have entered the lists. I further attempted to show that Mr. Gillespie's statements as to the antiquity and influence of the Galloways were equally untenable, and that his disparaging remarks as to the derivation and qualities of the early Northern Polls were contrary to all that was known concerning them. Judging from the tone and substance of Mr. Gillespie's letter in reply to mine, I was as "effective" in this part of the controversy as he admits I was in the other. I must also be allowed to observe that I am not aware of having expressed an opinion as to the characteristics of the modern Galloway cattle as is implied in this report, unless my reference to the appearance of that breed compared with the Aberdeen-Angus at the Smithfield shows and the London Christmas markets can be so described; but how that in any way helps the advocates of the Galloway breed I am unable to perceive.

I object, therefore, to it being made to appear by this partial representation of the circumstances that I took the side of a Galloway advocate against a supporter of the Northern Scotch Polls. I retain my opinion that Mr. Auld claimed more than can easily be established on behalf of the Aberdeen-Angus breed, but I desire to take this opportunity of stating that I believe he was convinced in his own mind that his contentions were well founded. The mistake, which is

my view he committed, was in using arguments of a speculative character in support of a partisan discussion on the merits of the two breeds. Mr. Auld's investigations into the traditional and antiquarian aspects of the question of the origin of Polled breeds are worthy of every encouragement and support; but whatever may be the case when he has completed his researches, it cannot fairly be said that at present they provide the suitable materials for the conduct of a "battle of the breeds." To utilize them for this purpose is, I believe, calculated to retard, and not to advance, the cause of scientific truth. I agree with Mr. Gillespie that each breed should be allowed to stand on its own merits, and, therefore, I maintain that any attempt to confuse the minds of foreigners on this subject must be met with summary exposure. That was the reason why I expressed my cordial sympathy with Mr. Auld's object in writing.

VERAN.

Fairfax (4249), 7th d. Pride of the 4th Duke of York (10167), 3th d. Princess Royal by Thick Hoek (6601), 9th d. Bampton Rose by Expectation (1988).

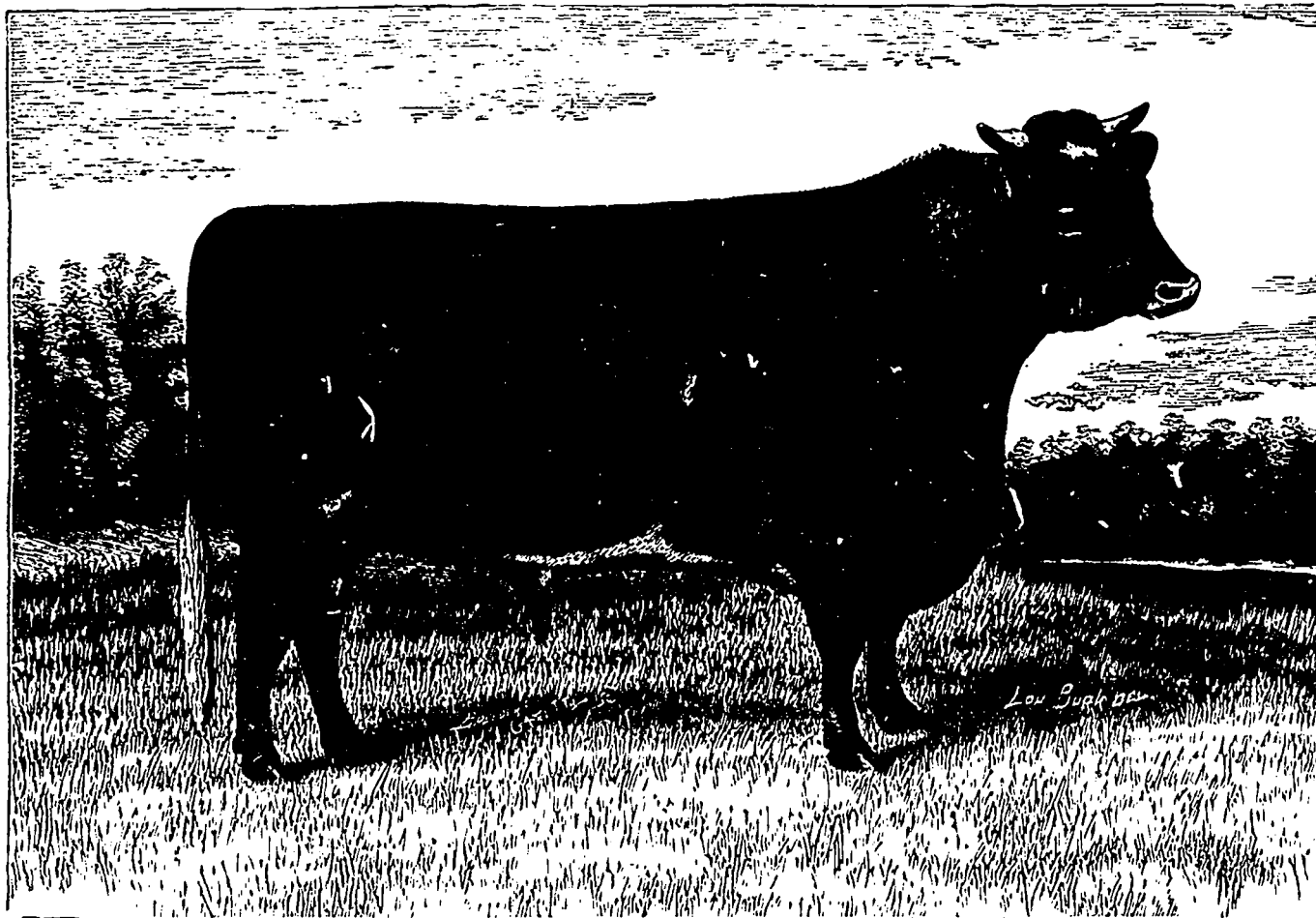
This pedigree includes animals of very great excellence and which have achieved much fame both in the sale and show rings. Royal Butterfly (16826) was own brother to Master Butterfly (13311), sold at three years for \$6,000 after having won all the prizes competed for from a calf to an aged bull. Royal Butterfly won about forty prizes and two cups worth \$500 and \$250, and when a year old an Australian breeder offered for him \$6000, but the offer was refused. At the dispersion of the Townley herd twelve animals got by him averaged about \$1300 each. The 2d Duke of

FOR THE CANADIAN LIVE-STOCK JOURNAL.

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

BY F. W. GRENSIDE, V. S.

In these days of scientific advancement, when most strenuous efforts are being made towards the solution of pathological problems, there is, perhaps, too great a tendency to neglect matters of *every day* occurrence, and in addition to bestow an amount of attention on the symptoms and treatment of maladies, disproportionate to their importance, when compared with the causes that bring these abnormal conditions into operation. In viewing disease from an economic and practical standpoint, we cannot direct our efforts towards its elucidation into a more useful channel



### THE SHORTHORN BULL BARON BAMPPTON (AT 18 MONTHS).

Imported by and the property of James I. Davidson, Balsam, Ont.

#### Baron Bampton.

This fine young Shorthorn bull, red enough in color to suit the most fastidious American, sufficiently rich in pedigree to satisfy the most particular of our critics, and a scion of a long line of illustrious show animals, is a model of his race. Individually he is excellent fore and aft and has a good strong level back. He was bred at Sittyton, near Aberdeenshire, Scotland, by A. Cruikshank, Esq., and imported by Mr. James I. Davidson, Balsam, his present owner. He was calved Feb 22, 1883, got by Roan Gauntlet (35284), and is from the dam Bampton Spray by Caesar Augustus (25704), 2nd d. Bampton Flower by Allan (21172), 3rd d. Butterfly's Joy by 2nd Duke of Wharfedale (16949), 4th d. Butterfly's Pride by Royal Butterfly (16826), 5th d. Frederick's Pride by Frederick (11489), 6th d. Princess Far by Lord Adolphus

Wharfedale (19649), whose sire was said to have been the last pure English bred Duke, was out of Duchess 73d, and his great grand dam was Duchess 00th, the ancestress of the New York Mills' herd. Allan (21172) was the winner of the Highland Society's prizes at Stirling and Inverness. His sire, Forth (17866), won two first prizes at the Royal Agricultural Society's show, Eng., and two first prizes at the Highland Society's show, along with the Society's gold medal and challenge cup. Caesar Augustus (25704) gained the first prize at the Royal Northern Society's show when one year old, and the challenge cup for the best animal in the show-yard, his sire being the celebrated Champion of England (17526). Roan Gauntlet (35284) was by the Royal Duke of Gloster (29864), dam Princess Royal, by Champion of England,

than in exploring the very important factor of cause.

There is no doubt a cause for every disease, and a great many of them can be pointed out, but unfortunately they frequently remain in obscurity, either on account of a favorable opportunity not being afforded a competent observer, or from the subtleness of the influence eluding the senses.

In dealing with this subject, it is necessary previously to state that they are of two kinds, viz: intrinsic and extrinsic.

In treating of the former they may be described as those conditions of the body or constitution either without or acquired that renders an animal particularly liable, with or without any doctoring influence, to manifest disease. This factor, although recognized as having an existence, even by the most casual observer, is not estimated at its true valuation as an ele-

ment in bringing about unhealthy conditions. For instance, the owner of half a dozen cows, who is subjecting them to exactly the same treatment in every respect, is annoyed by one of them bloating, while the others maintain perfect health. Now of course this cannot be attributed to anything else but a weakness somewhere in the animal affected, either from inability of the stomach or from defective mastication, the result of bad teeth, the process of dentition, or from the habit of greedy feeding. Such an example as this is frequently seen in a veterinary surgeon's practice. Another example, differing somewhat from the one just instanced in predisposing an animal to disease, may be cited in the peculiarities of formation of limbs in horses, placing these members at a mechanical disadvantage, as sickle-shaped hocks becoming curly, or too oblique, or too upright pasterns becoming the seat of ringbone, even before the possessor of them has been put to ordinary work. Those experienced in such matters recognize this as an unfortunate influence, and carefully guard against it in making a selection of horse flesh either for work or breeding purposes. Unfortunately there are not ill-shaped limbs to warn us of an innate tendency to bone diseases existing in particular subjects, which have inherited a taint of body. Although no fault can be found with the shape of limb or form of bone in some cases that show this tendency, yet in the great majority of cases there are some defects in these points, or in other words, they are a usual accompaniment of this inscribable disposition to develop these bony affections. Weakness of constitution, as shown by external form of an animal, although not pointing to any particular organ or group of organs as likely to become the seat of disease, evidences an inclination to numberless ills, the nature of which will depend upon the existing cause. In horseflesh, the form so much to be avoided, is portrayed as follows. Narrowness and shallowness of chest, short hind ribs, weak flank, confined loin, thin neck, split up quarters, round bone, small joints, long-backed, long-legged, washy-colored, coarse skinned and flat footed. The same defects or modifications of them are often seen among horned cattle, and confer a like tendency. Diseases as well as defects or a tendency to disease are transmitted from parent to offspring, no better example of which need be mentioned than the form of consumption so common in horned cattle.

*Extrinsic causes* of diseases may be defined to be any influence acting from without that tends to lower the healthy standard in the animal economy. There are a great variety of these.

First and foremost the *medium* in which animals live, ordinarily termed the air, should be as free as possible from impurities, for the atmosphere has very important duties to perform in keeping the blood in a healthy condition. Every animal, in the process of breathing, keeps contributing poisonous materials to the air, so that if a fresh supply of pure air is not continually provided, by proper ventilation, these noxious matters accumulating have a more or less evident deleterious effect, which shows itself most conspicuously when any disease or injury exists, aggravating and intensifying them, and then rendering what is usually simple and benign, serious and fatal. The baneful effects of impure air are markedly noticeable in strangles or distemper in horses, which disease usually runs its course in a week or ten days, but if the surroundings are unfavorable, or the ventilation bad, serious results follow and greatly complicate matters. The air of a building is also contaminated from the accumulation of filth in the form of liquid or solid manure, and the slovenly habit of allowing the excrement to remain in boxed stalls from day to day or week to

week results in poisoned air, particularly when the temperature is high, which favors fermentation, and the consequent evolution of noisome gases. *Over-crowding* also brings about the same condition of unwholesomeness, every inhabitant contributing its quota of impurities; therefore sufficient space admits of the dilution of the harmful emanations so that their activity is lessened. The difficulties in the way of keeping the air pure are, that the temperature must be of a suitable degree in order that animals inhabiting the building shall be comfortable and not subjected to draughts. It is an easy matter to keep up a supply of fresh air by opening the doors, but it is incompatible with health and results in a loss of food if the temperature is below 45° fah. for cattle and 55° fah. for horses. Although cold is itself injurious, when it falls with force upon an animal body, as it does in draughts, it is extremely likely to produce disease of a congestive or an inflammatory type. In order to attend to these principles, and have pure air, we must so construct our building as to admit this important element of health in such quantities as not to dangerously lower the temperature nor produce a draught. In bringing this condition about, the inlets for the pure air should be somewhat numerous and their calibre not more than a couple of inches; they should be situated as far as possible from the animals in order that the freshly introduced air may be diffused and mixed with that already heated, thus not perceptibly lowering the temperature. The outlets for removing the impure air should be near the bottom of the stable, not communicating directly with the outside, for there they would act as inlets, but forming the entrance to pipes which pass up to the ceiling before they discharge their contents, thus acting in the same way as a fire place or stove. Where holes in the roof are left, the warm air is rapidly got rid of, for it being lighter than the cold ascends and escapes. I am not in a position to submit a plan for ventilating stables, which would be applicable to all buildings, but attention to the principles described will aid in bringing about a proper sanitary condition. Some may think this subject unworthy of much attention, and that the only efforts necessary are to keep animals warm in the winter. To those that have poor and unsubstantial buildings this is of course the chief concern, but to those who house their stock in bank barns, and especially where there are many of them in the same compartment it is a matter of much importance, whether it is acknowledged to be so or not.

Although there may be no decided manifestation of disease in many cases from improper ventilation, yet there is frequently a want of thrift not to be justified by lack of food, and consequently there is loss sustained.

These bank barns are in many cases marvels of convenience, but are often not as wholesome as they might be. One often sees on opening the doors of one of them, steam rushing out like out of the vent of a steam engine, which shows there is far too much dampness. Although a moderate amount of moisture is beneficial, yet anything like wetness is detrimental, the ill-effects of which will be felt if the doors are allowed to remain open in the morning, which is generally the case. It will be opportune here to draw attention to the custom of letting animals out during the day. Of course, this is both necessary and beneficial, so long as it is properly done, but if not managed in a rational manner harm results, to which I can testify from personal experience. In most cases the plan is to allow the cattle to run out for from one hour to the greater part of the day. Now so long as they are engaged in drinking, frisking around and enjoying them-

selves, benefit is being derived from the change, but as soon as this ceases—which it generally does in 15 or 20 minutes—chilling begins, and harm is being done, and the ill-effects are to some extent proportionate to the excessive warmth and dampness of the stable and to the degree of cold outside. When the sun shines brightly on the animals and the cold wind is broken by some protection, there may be advantage in extending the time somewhat. But it is against the freezing-out process that anyone can see going on in half the barnyards of this country, that these remarks are particularly directed. In summing up, we may say, that the attributes of a healthy stable are purity of air, sufficiency of warmth, absence of dampness, and, last of all, but not of minor importance, is plenty of light. Light is essential to the health of all the higher forms of life as well to the lower. It exerts a vital influence of some sort necessary to the proper development of the blood. Only view the plant that is almost continually sheltered from the sun; the person whose employment is indoors, and it will lead to the conclusion that light has an action on life, and that a beneficial one. It would seem as if most of our stables in this country were designed especially to elude it.

(To be continued.)

### Fitting Animals for Exhibition.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—In the July number of the JOURNAL I see an article on "Shearing Sheep for Exhibition." I was rather astonished to see it there without any comment from the editor. Surely there is already too much deception practiced by exhibitors without having such work openly encouraged through an agricultural paper, especially one that has earned for itself the high moral reputation of the JOURNAL. The open encouragement of the thing is bad enough, but the statement that one who cannot shear a sheep so as to hide its defects and make it appear better than it really is, is not fit to be a judge, is simply unbearable.

In looking over the prize lists of the different Ontario exhibitions, I see there are no restrictions in regard to shearing, and exhibitors will no doubt make good use of the privilege. I know flocks that are being fitted for show, that now carry on their backs most of last year's wool; and as the time for exhibition approaches they will be blocked into shape to attract the eye of the people. In looking over the lists of several American shows, I see they require sheep to be clipped close to the skin not earlier than April 1st, and any that have been blocked so as to conceal defects, will be excluded from competition.

I think the system of judging from points would be a great improvement over the present hap-hazard way. It would then be necessary for breeders to adopt a standard of excellence, as has been done by the American Shropshire Registry Association, a copy of which I enclose, which may be of some benefit to judges of that breed at the coming exhibition.

Judges are too apt to be carried away by size. This should be guarded against, especially in young animals, when the age is not known. At one of our leading shows last fall a shearing Shropshire ram was shewn among the ram lambs and was awarded first prize; and although his face had the appearance of a shearing, the judges did not think of looking at his mouth. Doubtless such blunders seldom happen. At another show one judge was heard to remark to another that he was judge on Southdowns, but that he really knew nothing about the breed. Better have only one good judge and pay him for his services.

Yours truly,

JAS. GLENNIE.

Guelph, July 18th.

Mr. Glennie stirs an important question when he touches upon the moral aspect of the practices referred to in his letter. We thank him for the compliment he has paid us in reference to the character of the JOURNAL. If there is any one feature of it regarding which we have a greater anxiety than another, we think we are safe in saying that it is its

moral tone. Once render this uncertain and we do not care to conduct a live-stock journal, much as we love the work of keeping and writing about stock. But there are some moral questions, about which even "doctors disagree," and we apprehend this may be one of them. The article referred to was taken from an old-country exchange, to which it is credited, but we certainly are responsible for its appearance in the JOURNAL.

In reference to the right or wrong of the practices referred to, much will depend upon the intention of him who practises them, the sanctions of usage, and the regulations of the shows for which the exhibits are intended. If the intention of the person who shears his sheep unduly early, or who trims them, is to deceive, his act is of the essence of fraud, either with or without the sanctions of usage, or in the presence or absence of regulations in exhibiting. If his object is simply to have the sheep look well and nothing more, in the absence of prohibitory enactments, there seems to be no wrong done. In the absence of the sanctions of usage the perpetrator is guilty of something more than innovation. He steals a march upon his neighbor to give him the advantage, which is more than ungenerous; but if in accord with the sanctions of usage, there is no wrong done, where the intention is right.

When, however, the rules of the exhibition say distinctly that shearing before a certain time, or trimming shall not be done, and it is done, there is fraud, which no reasoning, however ingenious, will explain away, no matter what the sanctions of usage may be.

It seems to us there is some distinction between the practice of shearing unduly early and that of trimming. The former is too closely allied to deception, but not so much so the latter, which certainly tends to beautify, as does grooming a horse, or smoothing the horns of a cow.

The border-lines of practice here we know are not easily defined. Let him who thinks they are, define them. Mr. Glennie is right in singling out the sentence on which he pronounces judgment in terms so strong. It has not a nice ring in it, and yet it contains a measure of truth, so far as it refers to competency. It would be strange, indeed, if editors were infallible, which many of them seem to claim to be, and this is simply calamitous to the country.—ED.

### Points in Judging Shropshire Sheep.

The following are the points of excellence for pure-bred Shropshire sheep, recorded, or eligible to registry, in the American Shropshire Registry Association Record:

#### CONSTITUTION.

Constitution and quality indicated by the form of body; deep and large in breast and through the heart, back wide, straight and well covered with lean meat or muscle; wide and full in the thigh, deep in flank, skin thick but soft and of a pink color; prominent, brilliant eyes and healthful countenance.

25 Points.

*Objections.*—Deficiency of brisket, light around the heart, fish back, pointed shoulders, tucked in flank, pale or too dark skin objectionable.

#### SIZE.

In fair condition when fully matured, rams should weigh not less than 225 pounds, and ewes not less than 175 pounds.

*Objections.*—Rams in full flesh, 175 pounds or under. Ewes in full flesh, 150 pounds or under.

#### GENERAL APPEARANCE.

General appearance and character, good carriage; head well up; elastic movement, showing great symmetry of form and uniformity of character throughout.

*Objections.*—Head drooping, low in neck, sluggish movement.

#### BODY.

Well proportioned, medium bones, great scale and length, well finished hind quarters, thick back and loins, twist deep and full, standing with legs well placed outside, breast wide and extending well forward.

*Objections.*—Too fine bones, short body, deficient in twist, legs close together, light in brisket.

#### HEAD.

Head short and broad; wide between the ears and between the eyes; short from top of head to tip of nose; ears short, of medium size; eyes expressive; head should be well covered with wool to a point even with the eyes, without any appearance of horns; color of face dark brown.

*Objections.*—Horns disqualify, white face disqualifies, head with prominent bones, bare on top of head.

#### NECK.

Medium length, good bone and muscular development; and especially with the rams, heavier toward the shoulders, well set high up, and rising from that point to the back of the head.

#### LEGS AND FEET.

Broad, short, straight, well set apart, well shaped, color dark brown, and well woolled to the knees.

#### FLEECE.

Body, head, belly and legs to knees well covered with fleece of even length and quality; scrotum of rams well covered with wool.

#### QUALITY OF WOOL.

Medium, such as is known in our markets as "medium delaine" and "half-combing wool, strong," fine, lustrous fibre, without tendency to mat or felt together, and at one year's growth not less than three and one-half inches in length.

### Reply to Breeder re the Herd Book.

#### SECOND LETTER.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—The reply of "Breeder" in reference to the Herd Book controversy, seems to require some further remarks from me.

It occurs to me that "Breeder" is somewhat contradictory in his assertions. I take it that in his first communication no one could misunderstand his object to be, to injure in the eyes of the public the B. A. Association. He compares the work done with that of the C. H. B. and calls the one *dishonest* and the other *honest*. He characterises one as a *fraud*: *as deceptive as a forgery*; as misrepresenting pedigrees—while the other is so straightforward that he cannot well do without it.

Now, however, he tells us he does not want to *overthrow* the new book nor *build up* the old. What was before such an honest, straightforward record is now admitted to be full of glaring mistakes, so plain as to be easily detected by any one. In his first letter he expresses the hope that the C. H. B. would adopt the higher standard of their rival, and that until then we could have no worthy record. Now, however, he calls upon "the breeders to unite and form one good herd book;" and expresses himself as very much disgusted with anything at present existing, either *old* or *new*. He entirely and wilfully ignores the fact that some 300 of the breeders have united for the very object he proposed. But somehow this one unknown breeder has been left outside; and though there are hundreds united in solemn compact, it is of no avail, and of no account, so long as his ability is not represented. So he sounds out the bugle call to *the breeders to unite*. If "Breeder" will only give us his address, I think I will be able to point out a union already in existence; and if his disinterested enthusiasm for the breeders' interest, and his decided ability to guard these, are as apparent to them as one could hope, I shall be glad to resign my place and let him take the helm. No *mistakes* would then be made; no *frauds* perpetrated; no *forgeries* committed, no *deception* found; no *selfish interests* served, but perfection in Shorthorn records would at once be attained. Mr. Editor, I would gladly in honor prefer such an one, and hail his accession with much delight.

"Breeder" expresses surprise that I have not been able to discover what he has so easily detected, and then a little further on gives himself away by telling us that by the *merest accident* he has obtained information special to this case. This information he pro-

posed to withhold and leaves the reader with the idea that he has something that nobody else knows, and that he won't tell. Does "Breeder" think this the manly course? We have seen such an exhibition of superior wisdom among children in the schoolyard. But I would not have expected it of him. If his information is of such a nature that the facts concerning this wrong done the association and the public (as alleged by him) cannot be disclosed, then these insinuations should not be made.

Now I think I know all about how pedigrees should be entered for record. When a pedigree is offered in which there appears a bull not entered in any recognized record, such bull must, though he be dead, be recorded in our book. But it is the business of the party presenting the pedigree to complete it in all its details ready for registration. The secretary may, in order to accommodate, assist in this work, but it is not his duty but that of the other, who is after all to be held responsible. The secretary should carefully examine in detail and ascertain its correctness. If there is anything connected with it of a doubtful nature, or involving any new principle, it is then his duty to refer it to the committee of the Association having the matter in charge, for their final decision. I want Breeder to observe that I, as President, make no pretensions to examine all these pedigrees. That requires a man's whole time, and although I am quite willing to devote as much time as I have already given to the work of the Association, still my other duties will not permit of this additional burden, which Breeder seem to think I ought to assume.

Now I make no charge against any one. But "Breeder" does. Let us come to something definite. If then there has been cooking of pedigrees or forgeries, or frauds, it has been done by the party presenting the pedigree and overlooked by the secretary, or the secretary himself has been guilty of doing the wrong knowingly and wilfully. Now, Mr. Breeder, who is it? Let us hear. You allege you have the proof. If you can prove the secretary guilty of the above, you can prove him to be unworthy of his position. I do not believe you can. Although I can only boast of being the son of an Englishman, I believe in British fair play. I do not believe in stabbing a man behind his back or in the dark. I do not believe in insinuating such serious charges against a number of men without designating particulars, so that the alleged guilty parties may enter their defence.

So far as this special pedigree is concerned, that need not trouble anyone, as it has already been cancelled, and there need be no fear of its cropping up in any pedigrees in future.

One other paragraph in Breeder's letter humiliates me exceedingly. I am sorry to find that he will so misrepresent and wilfully misunderstand some sentences in my former letter. I charged him under an assumed name with seeking to injure his neighbors. Who were these neighbors? Certainly his brother breeders, who were charged as fraudulent, deceptive, dishonest, etc. Now he assumes that it was the parties owning these cattle improperly registered, and suggests that I would have him quietly inform these persons in their own interest to sell out immediately to some innocent man "before he let the cat out of the bag." Of course that would be no injury to one's neighbor. No, Mr. Breeder, I am not of that sort; I characterize such an action as worse than highway robbery, and I scarcely think your readers will appreciate this ugly thrust you have sought to give me in addition to those before.

I have no desire, Mr. Editor, to multiply words with Breeder over this subject, but I ask him in future to remember, first, that there already exists an association or union of Shorthorn breeders; second, that their object is to keep a *pure record* of these cattle; third, that they hope to make it such a record as may make even Breeder "proud;" fourth, that the association does not consist of a few but of some *hundreds of breeders*; fifth, that it is controlled by no one man but by the whole body of breeders; sixth, that Breeder may become a member, have a voice in its control and exercise his ability in suggesting improvements or remedying evils he may apprehend already exist. Only one condition must be complied with, and that is, that he draw the sword in open day and not in darkness.

JOHN DRYDEN.

"We are much pleased with the JOURNAL, and derive great benefit from advertising in it."—W. & H. Bollert, Cassel, Ont.

### The Coming Exhibitions.

The Provincial meets at London, September 7th to 12th. The entries for stock close August 17th. A Dominion grant of \$10,000 has been given to this exhibition. The directors, as we were going to press, were busy enlarging the prize list. There should be a splendid show of stock this year. Every lover of stock should attend. Secretary, H. Wade, Toronto. See advertisement.

Next in point of time, the Toronto Industrial, September 7th to 19th, for which the stock entries close August 22d. This Exhibition is, in many of its features, unrivalled on the continent, and has also a splendid prize list for stock. Secretary and Manager, H. J. Hill, Toronto. See advertisement.

The Guelph Central Fair will be held September 28th, 29th, 30th. Guelph is an important centre and will no doubt have a good Exhibition.

The Agricultural and Industrial Provincial Exhibition of Nova Scotia, held at Kentville, September 29 to October 2nd, promises to be a good show. Amount in cash prizes, \$6,200. Entries for cattle close September 5th. Wm. Eaton, Kentville, Secretary.

### Stock in the Far East.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

One feels almost exiled here after having been among the stock farms of Wellington, Waterloo, etc., a feeling something like loneliness steals over me when I rusticate and ruminate among the roadside scrubs which are always on hand in this part of the country to pry through any half-open gate or attempt any weak-looking spot in the fence. I could show you to-day inbred scrubs three years old this spring which do not weigh 250 pounds apiece.

With such surroundings a paper from one who dwells in the land of pleasant memories is most joyfully received. Your JOURNAL is therefore my most highly prized visitor, and I must again congratulate you on its most wonderful advancement.

I am sorry to see that our Government Stock Farm is made a mere political handle, and I do not think it could be more badly managed. It is located in Kings Co., on the Kennebecasis river. It is the happy possessor among other things, of several polled Norfolk cows and no bull. A flock of Shropshire ewes and no ram of that breed, and several thoroughbred scrubs.

There are, however, several fine private stock farms around and near Moncton, in Westmoreland and Albert Counties, whence considerable beef goes to England; also in Carleton Co. On the upper part of St. John river there is some very good stock, especially in the horse line. In St. John county Jerseys are quite numerous.

EX-STUDENT OF THE O. A. C.

### The Scrub Plague.

We have received the following from a lover of good stock in the eastern part of Ontario, one who practices what he preaches, and who is doing a good work in elevating the standard of stock-raising in his section:

"This is the land of 'scrub bulls,' although we have been trying to supplant them these fifteen years. It is almost discouraging to the owner of thoroughbreds to meet with experiences similar to yours as described in the JOURNAL, and they are not rare. It requires a vast amount of forbearance and charity to put up with them, and I fear stockmen are not furnished above their fellows with these Christian virtues. Something should be done to abate the nuisance, and while a tax would doubtless mitigate the evil, I fear it would raise such an outcry in most of the Provinces that the people's servant, the legislature, could not withstand it. Your paper is doing a good work in this direction, and it is by such means that public opinion will, after a time, be so educated as to demand and enforce laws for the protection of thoroughbred stock. Agitate! Agitate! Every lover of good stock in the Province is with you now, and their number is fast increasing."

### Cleveland Bays.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR.—Some parties from this place came to Canada last April and purchased a stallion called Young Luxall, and also a young mare. I think they got them near your city. Can you or any of your readers oblige by forwarding the pedigree. I would like to purchase one that would excel the horse named above, if I knew where to find one such in your country. Would like one about 3 or 6 years old. I purchased a Clyde from Canada last fall, which is doing well.

Truly yours,  
L. W. WHITBECK.

Box 677, Paw Paw,  
Van Buren Co., Mich.

P. S.—Will some of our readers please give the information?

### Tax on Scrub Bulls.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR: I was the first to advocate a tax on bulls, which I see meets with some favor among stockmen now. I think it ought to be about the value of the common scrub each year. But my sympathies were with the most enterprising of all Canadians—the new beginners in wilderness life—and therefore I wrote as I did. In most of the new settlements they are not able to buy bulls. Could not our Legislature be prevailed upon to furnish bulls for those localities—the animals and localities to be selected by some well posted member of the Agricultural Society. Now, Mr. Editor, I would like to hear your opinion on this subject and also that of other subscribers.

SUBSCRIBER.

Orwell, July 8, 1885.

It may be that in time the Legislature may see fit to do as subscriber has suggested, and their money might easily be spent in ways less advantageous to the general good. In the meantime we must first have the tax on bulls, as otherwise the Government would be supplying one section of the community with good bulls, which the older section say they do not want, so long as they are found clinging to the profitless scrubs.

### Enquiries and Answers.

STEAMERS FOR COOKING FOOD.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

Can you give me the name of a Canadian manufacturer of steamers for cooking food for live-stock? Perhaps some of your readers who use them can say.

STOCK RAISER.

Simcoe Co.

Will some of our readers answer the above in next issue?—ED.

REMOVING LICE FROM STOCK.

In answer to a recent inquiry on this subject (the manuscript of which has been mislaid), we give the following:

Persian insect powder, McDougall's sheep dip, tobacco and carbolic acid and water.

The two first are kept by druggists, and applied according to the directions.

The tobacco is soaked in cold water for a day or two, and then applied to the body, most freely where most affected.

Carbolic acid applied in the form of a wash. One drachm to one pint water is about the proper degree of strength.

"I am confident that if the farmers in general could be persuaded to take the JOURNAL, and read it, it would accomplish a wonderful improvement in the country."—K. N. SWITZER, Switerville.

"Your JOURNAL contains the most information relating to live stock of any paper we have yet seen published in Canada."—W. & C. W. CARROLL, Norwich.

### The Farm.

WHICH scientist will tell us the proportionate loss in nutritive value in hay thoroughly bleached from wetting, as compared with hay well cur'd?

At the Ohio Experiment Station a protracted trial with the object of ascertaining the best distances to plant corn for fodder with a view to the largest return of nutritious food, has been going on for three years past, and will continue ten years in all. The experiments thus far favor thin planting. Some are of the opinion that the best coarse fodder is that grown in rows three-and-a-half feet apart, with an average of one stalk to every six inches. Raising fodder by this method is certainly attended with some advantages, as it admits of easy planting, clean cultivation, matured stalks which will cure without moulding, and a very substantial food for the winter, when run through the chaff, and feed stalks and grain. Some years ago the tendency was to sow thickly broadcast, sometimes as much as four bushels per acre, with a view to produce a very fine stalk. One of the obstacles met with in this mode of culture was the harvesting; and another difficulty sometimes in curing. Latterly the current is setting in in the direction of growing in drills and cultivating the ground. The subject is well worth the closest attention, as we cannot do so well without fodder corn if we are to grow much live-stock.

Great Britain exports annually from 10 to 15 millions sterling in purchased manures, according to an editorial in the *London Agricultural Gazette*, and this is in addition to manure made on the farm. The same article states that the expenditure of the larger part of this sum would be wholly unnecessary if the manufacture and economy of farm-yard manure were better understood. This statement, if correct, shows a fearful drain on the profits of an interest which latterly is said to yield few or no profits. If we in Canada do not as yet expend large sums in the purchase of artificial fertilizers, we certainly do not make the most of our barn-yard manures. In some instances streams of essence run away in a liquid form, and pools thereof which oze from our barnyards and are evaporated by the sunshine. Fire-sang eats out its life-giving properties in others; and in many places large quantities are trodden into the mire on the outskirts of yards, and thus lost. Barn-yard manure, which should at all times be the object of the farmer's most anxious solicitude, is too often like the vagrant's child, uncared for and most sadly neglected. This is all the more remarkable when we call to mind that on its right use depend very largely the farmer's beef and butter and cheese, and we may add, his bread as well.

### Good Roads.

It is not easy to over-estimate the importance of good roads. Without them the farmer, remote from the towns and cities, is hedged in during the larger half of the year, and usually at such periods as afford him most leisure for doing his teaming. Some sections of the country have roads that are fairly good nearly all the year round. From the hills on the wayside gravel can be dug, and in such quantities that there is no excuse for the inhabitants of the locality, who do not take a national pride in keeping their roads in the most excellent condition. But there are other sections less happily situated. There are no gravel beds nor stone-quarries, only the most persistent clay which seems to find peculiar pleasure (if things inanimate can feel) in adhering to whatever touches

it when it is wetted. In such sections, at certain seasons of the year, there is no help for it. In periods of wet, the roads will be bad. But in how many instances are they allowed to remain so through the culpable indifference of those whose farms they fringe.

The manner of working them is, in very many instances, simply outrageous. The conditions on which the possession of good clay roads is based, so far as they can be termed good, are very simple. Enough turnpiking to take away the water, with watercourses properly constructed and kept open, and the free use of the road-leveller, as often as the road becomes uneven, is all that is required in summer, and the brisk use of the shovel in drifted parts in winter. Work other than in the directions indicated is a damage to the road.

The turnpiking should, if possible, be done at one time, sufficient to last a number of years, and then no more earth put upon it save the filling of ruts that be scooped out in depressions where the water has gathered, as when clay is put upon a road it will not get firm the same season, but will cut into provoking ruts after every heavy rainfall, whereas if no fresh earth is put upon the highway it will usually remain firm. Nor do we favor throwing up clay roads high in the centre, which seems to expose them too much to the action of the frosts, which renders them more liable to cut into ruts.

Sometimes large unbroken stones are thrown into damp places. If the object of the individuals thus engaged is to try the patience of the saint most sorely and to provoke awful profanity in those so inclined, it must be conceded that their success is most perfect. One would suppose that persons adopting this method had taken lessons from the private owners of stone roads on which toll is collected. We bear with the pioneer builders of the old corduroy; nay, we revere them. Every log which bumps the passer-by is a reminder of the hard necessity of those early days, while every jolt from one of those field stones is a reminder of some satanic influence.

When clay roads are turnpiked the labor of keeping them in a good state, in summer time, is reduced to a minimum. When the frost is going out in spring they should be gone over with the leveler, or as it is more commonly termed now, road scraper. The clods are in a friable state and will moulder before the leveler so as to fill every rut and crevice. This work will not require more than a day of a team and a man or even of a boy for 1½ miles of road. After every heavy rain, when sufficiently dried, they should get a round or two of the leveler. This will require only the period after the farmer's supper-time, 5 p. m., until sundown. An occasional drive over the roads of the same implement will keep them in the most proper condition—as smooth and as firm as the wharves of the cities.

How foreign to our description is the method usually adopted in working clay roads. Men and teams and boys and dogs and waggons, accumulate at a given point, as Mr. T. C. Patteson's foreman has amusingly expressed it, to enjoy their "annual holiday." Some irregular lines are drawn along the sides with the plough. We suppose it is the practice of *curse* ploughing. Heaps of earth and clods are dumped here and there over the road, reminding one of a succession of ant-hills of huge dimensions, which are to be levelled by the conveyances of travellers. Then there are alternations of rest beneath some leafy shade, where the men spin yarns and the boys play with the dogs. The repose which follows reminds one of the picture of the "Slave's Dream," substituting the shovel for the sickle. There they lie, stone dead with laziness, the unlifted shovel in the

hand. When the mound-builders have done, the road is fairly impassable for the remainder of that year. If it were made an invariable rule to level perfectly every scraper of earth dumped on the road, and to break every clod, we could bear with that incessant piling up of earth, but until this is done, by-laws are required in many sections to prevent the appointment of overseers.

In winter it is of the utmost importance to have good roads, and to have them open. The erection of wire fences are doing much toward keeping them open. Yet there will always be places where they will drift and where it is the bounden duty of the farmers of the neighborhood to keep them open, a duty they owe to their fellow-men. We care not what the statute-book may say, the duty we refer to is written on the statute-book of the great charter that regulates human duty. One might suppose, in trying to get through some sections, that the farmers were hibernating for the winter, their shovels slumbering with them.

Shame on the unpatriotism that does not impel farmers to keep the roads in a good state opposite their own farms. Some sections of Canada cannot have perfect roads owing to the nature of things, but in the older sections they may usually be fairly good. The public spirit of a community, even of a nation, may be fairly gauged by the condition of the highways, and certainly the facilities for marketing depend mainly upon these. We have seen clay roads in June so shockingly disfigured with unlevelled footmarks that a serpent in crossing them would need to stretch up its head like the boas of the jungle, to make a survey as to the best track.

The dis-ornamentation of our highways is a national reproach. One man wants some sods, and finding a smooth place along the highway, he removes an area of the green, leaving a good bed to form a nice thistle plot. Another trims his orchard and throws the brush into the cutting of the road. A third has surplus stones in his field and he dumps them into the roadside; and a fourth plants beautiful maples and other shades and mulches them with broken crockery.

It may be that we have been looking at but one side of the question. In many parts of Canada there are good roads, and nicely kept, in no way disfigured with unsightly objects being heaped upon their sides, but why are they not thus kept by all? Let every man take a pride in keeping the road neat along his own property and the thing is done.

Legislation on the road question is not far away. The anomaly of toll roads must be near its last. The system of working the roads, by turning them into a succession of ant-hills will not long be tolerated by a progressive civilization. And the echoes of the clamour for legislation are coming nearer and waxing louder, yet it is well to remember that legislatures usually move only as they are moved by that mighty lever, the people.

### Tribute to the Ontario Agricultural College.

One of the graduates of this institution (an Englishman) in writing to us not long since, used the following language:

"I feel that I owe to Canada a debt, for the college has altered the aspect of my life, given me an ambition that I would not exchange for anything, an insight into the higher hope and the nobler aim of agriculture. It has taken hold of the wandering indecisions of my youth and directed them into the wider streams of the ocean of agricultural science. Oh, I do wish the farmers of this country would realize their present state as compared with what it might, could, and

should be; they would exert themselves to employ the levers of influence which are theirs."

The writer adds—

"I hope to go home in October, and shall endeavor whenever I am able to remove the erroneous and false impressions which I know are not merely current, but largely prevalent in the old land, and if not being one of her sons, I have taken anything from Ontario and the college, I trust I may some day be able to pay her all."

### "To Be or Not to Be!" To Act or Not to Act.

BY C. H. F. MAJOR.

"Weary toiler in the field,  
Stop, for thy tread is o'er a nation's life;  
Time's richest ruins lie beneath thy feet.  
Does not within thee lie the power of strife,  
Within thy frame the pulse of victory beat?"

Farmers of Canada, have you ever put it thoughtfully to yourselves what position you occupy in society, and in what manner you bear the heavy responsibilities resting upon you? If not, do so and be still. Witness the great agricultural platform—the highest and noblest in the land—silent and unoccupied, with those who should be shaping their country's future hesitating on the steps, while from every other platform are rung out the bold utterances of men who can live while they breathe, and make their influences felt while time is yet their own. I ask you now to ponder upon a few things which are intimately connected with your own weal and welfare and with the prosperity of our great Dominion.

Canada an agricultural country: her population essentially agricultural; her agricultural resources unbounded—and upon the development of these depend her future greatness and prosperity—yet sees her national life moulded by men of the black coat profession, her higher classes composed of anybody but sons of the soil, and the gems which mark the growth of wealth and intelligence; institutions which are the pride of any class but the farmers. Can you, honest farmers, stand among the town and city gentry, without feeling out of place, and in a social element which pretends to a greater degree of intelligence and refinement than yours. These have made their "pile" out of some one or other of the many marketable commodities of the world. Mr. Fritts & Ribbons and Mr. Sugar & Tea are gents now—you are only a country clodhopper. Yet the nation is annually fed by you, in great part warmed and clothed by you, for from the Queen upon her throne to the lame beggar on his crutch, they all depend for each day's bread upon the fruit of the farmer's toil.

"Don't go into farming; there is little money in it." "Going to be a farmer? why half the farms in the country are mortgaged!" "Oh, you farmer, you!" is a common city-born expression for indicating unskillfulness. Such the opinions men have of agriculture and her sons. Now why? Because the farmers have been asleep so long, and are but slowly, oh, so slowly, waking up to a sense of the greatness of their profession, and to a knowledge of their rights and powers.

### FARMERS DO NOT OCCUPY THEIR FIGHTFUL PLACE.

Farmers of Canada, pause; pause in your hurried, drudging manual, but indolent intellectual career. How long shall men of every other profession and trade outstrip you in the race for wealth and fame? How long will you feed and support towns and cities, and the higher institutions of national life, and yet be spurned, scorned, looked down upon by those whose intelligence and dexterity allow them to weave from your hard toilings the filaments and fibres of their lives? How long will you continue to raise healthy

and intelligent boys, and allow them to grace other professions and become shining lights in other departments of labor, receiving in return to recruit your ranks the hesitating, the failures, and the off-scourings of society? White faces and unblemished hands, still whiter frills and collars, are the ladies and gentlemen of the land, while the brown and hardy faces and the horny hands, those who have labored, toiled and sweated and been the first movers of the levers of national life, are sneered at in their fence corners, and talked into the obedience of a shameful degradation by cleverer and more capable, because more learned, men. I condemn not the older generation of farmers. All honor to those rough and hardy pioneers, and their children of the log cabin, who, finding Canada a virgin forest, battled with patience, energy, and sweat of brow, through long toiling years with tree, stumps and stones, and have placed her in our hands a country where the morning sun salutes ruby orchard and verdant garden, golden field and emerald meadow, lusty town and spreading village, a legacy of latent though right royal wealth, an inheritance Canadians may well be proud to call their native land. I ask not further spoil from the veteran victors and bequeathers, but the rising generations, to those who are still hale and hearty, and yet have time to rise and shake the dust of opprobrium from their necks, do I appeal. Let the older and more experienced farmers, not hindering those they have left their legacy to, so temper their zeal that they may waste energy on nothing that will not bear the stamp of practical utility.

"Sentimental nonsense," says some narrow mind, "to think that a farmer can ever become such as other business men are;" he has neither the time nor the money. No time at all, save when a boy, to spend odd hours gossiping at the village store or mooning the hours away over the stove, and, when a man, to read the "daily" rant on politics, or work himself to an early grave, putting on his already strained arms the legitimate work of the head. I know there are farmers who have made a comfortable pile; but are they the majority? Are they not men marked in the neighborhood for extra intelligence and stability of character? Others have brought money into farming from other sources, and have succeeded, though usually in some fancy line of farming.

A writer has said that "an intelligent citizen adorns his place." Is that accomplished by the average Canadian farmer? What does he know about his profession in its natural light? moreover, what does he care? Would he have the means of knowing, and knowing, will he care? Let him take the report of the select committee appointed at Ottawa in 1884, "to obtain information as to the agricultural interests of Canada;" let him read the facts, mark the truth, and consider well his duty.

The report is chiefly made up of answers to a series of twenty-two questions which the committee issued and distributed through Canada, relating to the disadvantages agriculture labors under; the deficiencies in all its departments, the importation of seeds and fruit scions, destructive insects, forestry, the appointment of a public analyst and entomologist, the establishment of experimental farms, a central bureau of agriculture and other kindred subjects. The answers are most interesting indeed, coming from toilers in the field and thinkers in the study, and contain so much material for thought that every intelligent farmer should have one in his hands and let its matter ferment in his mind.

#### THE HERITAGE UNREAPED.

One gentleman, speaking of farmer's disadvantages, says, "Principally from a want of knowledge

in his trade, and of the requirement of local as well as foreign markets, the loss thereby occasioned to the Dominion, as well as to the farmers themselves is immense, and equals, annually, the whole agricultural production of Canada—a loss amounting in the aggregate to over two hundred millions of dollars every year. In other words, our farmers do not produce one-half of what they might and should." If this statement is true, does it merit heedless inattention? shall it not receive a single thought? If it is exaggerated, shall it pass unchallenged, this stigma upon the characters of farmers so unrefuted? Do farmers value their reputations so lightly that they can be told with impunity that they are not men enough to do more than half their appointed work? Will the glow of injustice or the pallor of shame delineate the truth in their cheeks? The largest butter exporters in Montreal say that 5 to 10 per cent of Canadian butter is good, 25 to 30 fine, and 50 to 60 is poor. The estimated annual loss on butter and cheese is \$15,000,000. Does this mean nothing? Is it a fact to be laughed at, or noticed but to be despised? The good effect of practical instructors on the cheese industry is well known, yet there are who will assert not only that nothing can be done, but that nothing need be done.

The report, however, contains some conflicting evidence, or, at least, appears to. One gentleman, while trying to show the deplorable condition of agriculture, gives the average yield per acre of wheat in Ontario, for 1881, as 14 bushels. Another gentleman, showing how well Ontario compares with the United States, gives the average yield for 1882 as 28 bushels. Either 1881 was a very bad year, or these statements are woefully deceiving. Is it of no account for farmers to hear the true condition of their interests, or are they to be bumped around between the extremes of exaggeration? Yes, as long as his interests are left to himself, or rather to anybody who likes to meddle with them. Nearly all the gentlemen praise up the cattle quarantine at Quebec, or else consider the present system too stringent. The Guelph Experimental Farm (not "Model Farm," as the Toronto papers always put it) importation was there last year; the truth is known, yet the report for that year praises it up highly. In a letter last month, I told our editor of one defect, which, small point as it is, appears to me to nullify the whole system, and causes a large annual expenditure for the purpose of not preventing the spread of disease. Yet farmers and importers have been taking cattle through year after year, but nothing is said, nothing is done, and the farmer's great beef market is endangered and his cattle exposed to undue hazard.

#### FARMERS SHOULD DO THEIR OWN BUSINESS.

In 1877 thirteen gentlemen of the Dominion Parliament were formed into a Dominion Agricultural Council. The Council was fully organized into twelve departments, and the work of each mapped out. Here things ended—mind you, in 1877—no meetings were held and nothing was done, because the Parliament that organized the Council would not grant the means necessary to make a start. Go on in your independent and manly course of conduct; vote for lawyers, doctors, merchants and wealthy talkers; put all their platform talk and promises and their duties toward you in one scale, and the practical outcome of their regard for your interests in the other; see which will touch the beam and then ask conscience for its approval. There you have practical proof that, if you will not discuss these questions, no one else will. Farmers of Canada, rouse yourselves; "quit yourselves like men not slothful in business;" and your legiti-

mate work, aye, your duty is not bounded by your own small affairs. Stir up the strong energies which lie latent within you; take hold of your own matters in their national as well as personal aspects; let not your business drive your weary bodies to death, while the mighty energies of the brain lie dormant and useless, and the higher instincts of your souls lie sunken in the slough of self.

#### TREATMENT OF OUR FORESTS.

If there is one subject which the farmers have treated with a neglect which is absolutely criminal, it is forestry. This delinquency on the part of the farmers calls for the most decisive reprehension, and should be visited with an immediate death. The forest, by its cooling influence on the atmosphere, condenses rains which would else be lost to the drooping vegetation; it holds the water thus obtained as in a reservoir, doling it out with a refreshing regularity instead of allowing it to rush over the ground, washing fertile soils bare to the rocks, and sweeping into the valleys with the destructive force of floods; it shelters man, beast and crops from inclement winds and parching drouths, and is altogether such a potent agent in the determination of a country's wealth, that it is a standing disgrace upon the characters and conduct of men who think themselves good citizens, to allow the terrible destruction to continue. "Bosh," says some farmer; we want the land, and trees can't help my crops to grow; you can gas and theorize as you like, but we want the land." Farmers, can any one of you defend such a statement? Upon what authority do you aver that trees are not conservators of a soil's fertility? Evidence, facts, truth, can be piled up before you; the older countries of the earth can be taken one after the other, and it can be fully proved to you that as surely as they were denuded of their forests, so surely did aridity, barrenness and poverty come upon them. Yet you will not believe, you will do nothing, and as long as a single stick of wood lies in the pile at your doors, you will not stir a foot nor hudge an inch to arrest the worse than criminal destruction. Forest societies meet and talk, big guns shoot off about trees, Mr. Phipps can send out from Toronto valuable reports teeming with unanswerable arguments that action in this matter is but duty, yet nothing is done but by individuals scattered here and there. The rack and ruin goes on; axe and fire destroy whole townships and lay bare the barren rock in whole districts totally unfit for agricultural purposes; the streams dry up and the winds bite and scorch; the rains float mockingly overhead, while the thirsty earth languishes; or when they come they come with a vengeance and are gone, leaving behind them a maximum of evil and a minimum of good. The people see all this, the Government knows all this and more besides, yet what the one forgets, the other ignores; what the one wilfully laughs at, the other hides and covers up. The farmer is an honest Liberal or Conservative; he spends his hard-earned leisure reading the party paper or discoursing learnedly on politics, performs his highest duty to the State, *i. e.*, votes for the right side, and then eases his conscience, while the highest interests of the nation are allowed to stagnate and sicken, he, meanwhile, busied with daily cares and the many petty nothings of political controversy. O noble man! O high-souled, patriotic citizen! O essence of unimpeachable devotion to duty! go on in your honorable career of selfish grab and gain, march on to the glorious victory of a bloated bank account and a ruined native land, attend to the dictates of self for a little while, then lie, and leave an arid soil and an unpropitious climate and a toiling, struggling posterity to curse you for your neglect. Is

the demon of improvidence for ever to defy the God of Providence, the devil of destruction for ever to pave the way for the extinction of the means of life? O for the brush of a raptured artist to paint on the one hand, the land flowing with milk and honey, with its equable climate and frequent showers, its running brooks and rolling rivers, its golden fields and fat meadows, its rich verdant pastures and orchards pregnant with delicate fruits, its easy work and noble life, and on the other, the country of drought and deluge, with its climatic extremes and vicissitudes, its frightened looking fields, its scanty vegetation and stunted fruit trees, its hard, active labor and drudging life! O for the pen of a gifted writer to depict the sad and sickening spectacle of ruin and destruction and to show man how he may avoid it! O for the tongue of an inspired orator, burning with the breath of Truth, to warn, to appeal, to force into action the latent energies of a people guilty of a ruinous self-deception, to show Canadians that by doing their duty they may crown their native land with the price-less radiance of fertility and wealth.

Canadians will enact the sad histories of other countries over again, strip their land of the charms which nature has so bountifully bestowed upon her; and, when too late, will but imperfectly endeavor to supply what now they might conserve and augment. Arise, O Genius of Canada, awaken from sleep ere thou art shorn, like Sampson, of the locks of thy strength. Clothe thyself with energy, and, with a quickening virtue in thy voice, teach, teach thy sons their duty. Farmer, if you do not believe, go to the histories of Europe, read, be convinced, and be still till the old self dies and the old man arises with his death-defying purpose and his iron strength.

(To be continued.)

### How to Make Farming More Pleasant.

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

(Continued from July issue.)

#### THE PLEASURE OF STOCK-RAISING.

Again, the farmer will find his pleasure increased by cultivating a taste for stock-raising. It will relieve him of much manual labor, and if his tastes run at all in that direction will add largely to his profits as well. Now to accomplish this several things will be necessary. First, he will get no satisfaction, or profit either, in attempting to raise what is commonly called the scrub stock of the country. He will find they will neither pay for breeding nor feeding. He will neither get pleasure in viewing them on his farm nor pleasure in counting his money after they are sold. In this matter as in others I speak from actual experience. I was once taught, what some still believe, that there is not so much difference after all in the different sorts of animals; that is, give the ordinary ones the same feed and attention and you will have the same good results. I have only to say that a little better experience such as I have had will very soon convince any one of the fallacy of this notion. Our common cattle are not flesh-producers at all. There are many of them good milkers, but for the butcher are very far behind. You get in them an extraordinary growth of horn or perhaps a prominent backbone, but you will have little flesh in those places where the butchers most desire to see it. Yet after all it is encouraging to see how easily and surely even these may be improved by the use of a bull of one of our better sorts. Thanks to the enterprise of our earlier breeders and importers these animals are now within the reach of almost any of our farmers, or at most a combination of them. Secondly—the farmer will get no pleasure from this business nor profit either unless he determines to give them a liberal supply of food and constant attention. There can be no pleasure in viewing the cattle on the farm whose backs are bent upward from exposure to the cold and inclement weather, and which are provided with barely sufficient food to keep them in existence. If the mercy of that man extends to the beast under his charge he will

shudder as he sees them. On the other hand it is a real pleasure to view stock whose very appearance indicates the satisfaction and enjoyment of their treatment.

#### TAKE GOOD CARE OF YOUR STOCK.

What I would desire most to impress upon you in this connection is the importance of caring well for the animal the first year of its existence. Push it on as fast as possible; don't be afraid of getting it too fat and thus spoiling it. Give it plenty of air, plenty of exercise, and plenty of food. A great deal depends upon this, for if one is pushed forward and another stunted it is evident that by the same treatment afterwards the one must remain in advance of the other—unless it may be you wait until they reach years of maturity. I have in my mind a farmer whose steers invariably weigh heavier at three years old than those of his neighbors. They use the same bulls, his cows are no better if they are as good, when they come to the stall, the others are fed quite as well and yet the average weight will be from one to three hundred less. The reason is found in the little extra care of the young animals. If you reach the same weight at two years old in this way as in the old way at three, the profits are much larger. In order to get the best results the flesh once on must never be lost. The principle of Dr. Franklin's adage, "a penny saved is as good as a penny gained," is perfectly true in reference to stock-raising. A pound of flesh saved is as good or better than a pound gained. To successfully guard against this loss will require much watchfulness and much vigilance on the part of the farmer. If in summer the grass becomes withered and is not nutritious, it should be supplemented from some other source. A very good plan is to plant adjacent to the pasture an acre or two of American corn, which will prove of great value in this respect. Any one can see if the flesh be lost it must in the end be put on again, which adds much to the cost and expense of the animal. Don't be led astray by the idea that what will pay one way will pay another in this matter. I hear men frequently say: "It may pay you to feed this, but it would not pay me." Now anyone will see if they would but think a moment that the pay is altogether outside the question of ownership and is not affected by it. I would rather hear you say, "What others can do, I can." Don't make the mistake of some that because they are told these better sort of animals will keep easy, that they will live on air alone. The difference is when food is given they give you ample returns, which cannot be got from the others, no matter how you feed. That farmer only wastes his money who purchases better stock and then refuses the food which alone can give the profit.

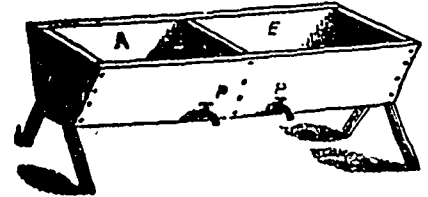
#### BE THOROUGH AND AHEAD OF TIME.

Another element in pleasant farming is a determination on the part of the farmer to have his work in every department thoroughly and well done. It is always true in our business that whatever is worth doing at all is worth doing well. The farmer will find no pleasure in his business whose farm is covered with thistles and rubbish; whose fences are always out of repair and as a result of this, whose cattle are always roaming where they do not belong; whose work is always behindhand; and who, as a consequence, always works at a disadvantage, with nothing more than half done. He will find it of advantage in this respect and greatly tending to make his work more easy and pleasant, if he determines to keep the work well ahead. You must drive the work, or the work will drive you. Everyone knows at how much less cost and trouble work can be done if done at the proper time than a week or two later. One of the drawbacks of our climate is the shortness of the season. In some other countries if your work is not done this week, it may be the next; here it must be done at the allotted time or the chances are not at all. It does not do to wait until the spring opens and we want to start the plow, to have to bring it in from the field where it has been wintered and take it to the shop for repairs. All these things should be placed in readiness so that work may be commenced at the earliest moment, and having got a good start, keep it. It is better to start a little too early than a little too late. You will find, I think, a day at the beginning worth two at the end of the season.

(To be continued.)

Mr Harry Sirete, Ashdown, writes. "I like your JOURNAL very much; would not be without it upon any account. May you prosper in your enterprise."

### A Convenient Wash Tub.



L. D. Snook gives, in the *Country Gentleman*, the following description of this useful article:

"The sides are 5 feet in length, 15 inches high; the bottom is also 15 inches wide. The top of the box should be 18 or 20 inches wide. It should be made from  $\frac{1}{4}$  inch well-seasoned pine stuff, and put together with white lead in the joints, and held in position by a liberal use of  $2\frac{1}{4}$  inch wood screws. A carpenter will put it together in less than half a day. The section A is used for washing the clothes, while E is used for rinsing or bluing, as the case may be. If a wringer is used, attach it to the partition B, or at the end, as the progress of the washing demands. Insert faucets at PP. The washroom may be so arranged as to convey the suds, etc., directly into an outlet pipe or drain, which will save much lifting. Make its legs of any length desired. Handles may also be attached at each end for more easy handling. This arrangement is cheaper than ordinary washtubs, and will be found far more convenient."

### Inquiries and Answers.

YARROW.

Some time since a weed was sent to us for identification, the writer stating that it had been received in some grass seed, and expressed fears that it was a noxious one.

We should be supplied with the flower before becoming absolutely certain as to the identification, but are strongly inclined to place it as *Achillia Millefolium* (yarrow), very common on waysides and in fields, but not bearing a bad reputation with us. Being perennial and of the composite, it requires to be watched or it may get too common.

### ORGANIZING A FARMERS' INSTITUTE—METHOD OF PROCEDURE.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I write for information in reference to organizing a Farmer's Institute. Please give method of procedure in organizing, whether a preliminary meeting is necessary to elect officers, etc., probable time of holding same, and by-laws governing them. By giving the above, or any information in regard to these Institutes, you will oblige

Yours truly,

JAMES M. FARLEY.

Belleville, July, 1885.

We have of late received similar enquiries from other parts, and shall very cheerfully give information through the JOURNAL whenever sought in reference to the matter, as the farmers will receive untold benefit by organizing Institutes and carrying them on properly. Hitherto in Ontario they have been transient in their character, only embracing one meeting or series of meetings.

One of the first of these meetings, which assumed a permanent character, was that held in our city on January 17th and 18th of last winter. It will be advisable to call a meeting of farmers for the purpose when it is intended they shall take a permanent form. The by-laws that shall govern them are left to the discretion of the organizers. Those governing our own Institute referred to above we will give below, reproduced from the March number of the JOURNAL, and will in September issue give the fuller detail which our limited space now excludes.

By-laws of the Wentworth Farmer's Institute:

1. That the name of the organization be "The Wentworth Farmers' Institute."



2. That the membership of such organization shall consist of all persons who pay an annual fee of One Dollar, which will give to every member of the family all the rights of membership except that of voting.

3. That the officers consist of a President, Vice-President, Secretary-Treasurer, and a Committee of Management, consisting of five, all of whom must be members of the institute, and who are not at the time of their election in arrears for dues.

4. DUTIES OF OFFICERS.—It shall be the duty of the President to preside at all meetings when present. In his absence his place shall be filled by the Vice-President.

It shall be the duty of the Secretary-Treasurer to convene all meetings on the order of the Committee of Management; he shall keep minutes of all meetings; he shall be responsible for the custody of the books, papers, and other property of the institute, shall receive and hold all monies belonging to the institute, shall pay out the same on the order of the President, and render a proper financial statement yearly at such meeting as the Committee of Management shall designate, and he shall also keep a list of members and attend to all duties properly pertaining to his office.

It shall be the duty of the Committee of Management to supervise the practical work of the Institute in all its details.

5. The election of officers shall take place immediately after the adoption of these by-laws, and thereafter at the first meeting of the Institute held subsequent to the first day of January in each year, which shall be the annual meeting, and any vacancies occurring may be filled by election at the next ordinary meeting.

6. The annual fee shall be payable at the first meeting of each year.

7. No person shall be entitled to vote at any meeting except members not in arrears.

8. The meetings shall be held at the City of Hamilton, or at such other place as the Committee of Management shall designate.

9. These By-laws may be added to, amended or rescinded in part or in whole at any meeting of the Institute by the vote of two-thirds of the members present at such meeting.

### The Dairy.

Koumiss, an effervescing drink made from pure Jersey milk, without the use of any acid whatever, is being made in large quantities at the "Oaklands" Jersey dairy. This very palatable drink is much in favor with physicians, who prescribe it in cases of dyspepsia, indigestion, consumption, etc. We are glad indeed to know that a preparation of this nature is being made in our midst and by parties whom we know.

In speaking of milk tests and butter records the *London Live-Stock Journal* puts it well when it says: "What is wanted are cows that will give, not the largest amount of butter and milk regardless of cost, but the largest production in comparison to the food consumed, on a yield that will show the largest profit in its production." This has been our own view from the first, and hence the advisability of dairymen keeping exact milk records to determine just what each cow is doing composing the herd. Some will object that the adoption of this plan will entail much additional labor; but will it not prove labor of the most remunerative kind? Suppose a dairyman has one cow in his herd which will net him \$50 in the season, and another cow which gives him but half that sum, by keeping accurate records he will obtain this important information, which will prove to him, it may be, a full offset for the additional labor entailed. Without the records he might be sensible that a marked difference existed in the product of the two cows without being at all aware of the extent of the difference. No cow below the average should remain two years in the dairy.

It is the opinion in some quarters that a large trade in dairy cows could be carried on with Great Britain if the trade was properly managed. Last year something was done, but of a character likely to blast the trade at the outset. Some cows were sold, represented as near the calving, which did not come in for months. Trade carried on in this way can never succeed, nor should we desire that it may. There is a difficulty here that may prove an insuperable barrier to the establishment of a very large trade. It is not easy for the shipper to know to a certainty that the cows will calve at the time represented, as he must rely upon the statement of the original seller. How much it is to be deplored that many will sell the truth for gold, and their manhood along with it, and thus scatter wider the seeds of distrust that have produced a harvest of disturbing suspicions in all the avenues of trade. When men meet for barter, what a weight would be removed if every one knew that his neighbor never practised guile! It would remove almost every reef and hidden rock and treacherous shoal that now endanger the avenues of trade, and make it smooth sailing into the harbor of success. As things are, individuals very generally approach each other in barter in the attitude mentally of two prize fighters, each making feigned motions and watching the movements of his opponent with an eagle eye. If the history of barter were but truthfully delineated on canvas, who would look upon the hideous object? It is on the canvas of the ages all the same, and none can blot it out.

### The Possibilities of the Dairy Cow.

READ BY THE EDITOR AT THE CONVENTION OF THE WESTERN DAIRYMAN'S ASSOCIATION.

No man in this assembly will for a moment question the importance of the subject which forms the basis of this paper, but many even of the leaders in this vastly important interest may never have sufficiently considered it.

The possibilities of the dairy cow—who, after the prodigious feat of Mary Anne of St. Lambert, will take upon him to say what these are? Who shall be so rash as to plant the land-marks permanently or to draw the final boundary lines? We shall not hazard the attempt, but simply present to you as concisely as we can, the little basket of first fruits that we have been able to gather hastily on the outskirts of this almost unexplored vineyard. The first question that naturally meets us on the threshold of our argument is this, *can the standard of the average dairy cow be permanently raised?* and the second, an offshoot therefrom, if so, *how shall this be done?* To the first we give unhesitating answer, *it can.* To what extent? you ask. We reply about *one hundred per cent.* in the near future. In days more remote we cannot say how much more. The report from the Bureau of Industries for 1883 gives 2784 pounds of milk as the standard for the average cheese-producing cow of Ontario for the season, the average duration of which was 156 days. Mr. D. M. McPherson, of Lancaster, assures us that the standard of the dairy cow can be raised to 6,000 lbs. per season, and surely, owing to the vast extent of his dairying, and his experience in it, his opinion is of much worth. He tells us that the standard cow per season in the Glengarry section was formerly 2,000 lbs., but that since the farmers there have felt the gratifying impulse of the stirrings of the cheese industry, the standard has advanced to nearly 3,000 lbs. per season. Prof. Wilson stated at the opening of a class for agriculture in November in Edinburgh that in a few years the milk produce might be increased from 500 to 1,500 gallons a year. These are certainly

splendid possibilities: the very mention of them must create stirrings of impulse within the breast of every dairyman who hears them. And why should they be thought incredible? Man has been endowed with the power of modelling and remoulding, even in the animal creation, that is little less than divine. In this respect creative power alone is denied him. In the sense of originating out of vacuity evolution follows in the train of his efforts, such as must have astonished Darwin himself, but it is evolution that results from the plastic application of the powers of intelligence operating on matter, and not from any hidden inherent forces that even animated matter may possess.

Confront an ancient Briton of the Teeswater region of one thousand years ago as he roamed about through darkening forests, clad in the skin of a bullock not much bigger than himself, with one of those ponderous productions of the same land which weighs nearly two tons, and what would be his astonishment? We can fancy the man who would fight the sea-kings of the East running away from the gigantic spectre as some monstrous production of the angry gods. Present to an Ayrshire clansman of the same period a modern Ayrshire cow. In those old days he could himself swallow at a single draught the milk produce of his cow. The Ayrshire cow of to-day would give him all his desire at one milking, and satisfy the wants of his "guid wife and bairnies ten" and also leave a little for a "neebar's" sick child. The native cow of the prairie only suckles her offspring for a few months. By the moulding process referred to her progeny may in time be made to milk at least ten months in the year.

See the advance that has been made in other live-stock lines. In 1719 the average weight of horned cattle in London, England, has been given at 370 pounds at five years old—we presume the above was dead weight; at the present day, in the same market, the average dead weight at the same age (dressed), and from the same source, cannot be less than three times that amount. Why, then, should we not believe that the average dairy cow for the season will not be able to produce at least 5,000 pounds instead of 2,784 pounds, as at present? We say 5,000 pounds, as, though we do not doubt the correctness of Mr. McPherson's statement when he speaks of 6,000 pounds, we choose the lower average in the meantime as more likely to catch the ear of the average dairyman. If the standard is fixed so high as to shake the credulity of interested parties, all hope of reaching them by way of inciting to higher effort is lost. In this way we fancy the owner of Mary Anne almost wishing that that gigantic record had not been so high, since it has led grave thinkers on both sides of the ocean to shake the head as to the correctness of the record of this wonderful performance, unique in the history of dairy cows.

Taking 2,784 pounds, the figures given by Mr. Blue as the standard cheese factory cow of 1883, and the returns from these as he gives them, we have the handsome revenue of \$3,396,822.21, from cheese made in the factories alone. But suppose the standard cow the same season had given 5,000 pounds, the returns from the same 266 provincial factories would have been \$6,100,721.64, or a difference of \$2,703,839.43. To produce a similar sum from the 2,784 pounds per season cow the number of cows must be increased from 117,577 to 211,165, thus requiring an additional outlay of capital invested, additional cost of feed, and additional pay for attendance and milking. We cannot believe that the 19,797 patrons of cheese factories (the number in 1883) will allow this

sum to lie ungathered as the price of *indifference* in regard to the possibilities of the dairy cow. This sum, divided amongst these, would give each of them \$136.56, almost enough to give one son in every family the benefits of a higher education for a whole year.

Mr. Blue gives the average returns of each cow per day as 18½ cents from the cheese factories, produced by the 2,784 pounds per season cow. The 5,000 pounds per season cow would swell this sum to 33,225 cents; multiply the difference, 14,725 cents, by 710,519, the whole number of milch cows in Ontario in 1884, and we have the magnificent increase of \$10,452,392.27 on the supposition that the standard cow in the private dairy is not superior to that in the cheese factory roll, and that she is quite as susceptible of improvement. Men bewail the rich stores of honey that are left to lie ungathered in the beautiful fields of Ontario. How much more should we bewail the cargoes of butter that are not forthcoming, and the rivers of milk that never flow, and the millions of money distributed in other lands, because of the low standard of the dairy cow with which our countrymen are content.

The calculation in both cases is for only 156 days in the year. Extending the duration for a longer period, which is certainly legitimate, would still further swell the revenue.

The capabilities of the leading dairy breeds in this country have not as yet been determined by way of test, unless in a few isolated instances.

Mr. Thomas Guy, of Oshawa, a leader of the Ayrshire interests in Canada, has done something in this way. In 1882 his herd, which won first prize at the Provincial, Kingston, as best herd of five cows for general purposes and profit, gave him an estimated aggregate of milk each for nine months in the year of 7,290 pounds, but, as the milk was not weighed daily, the estimate is only an approximation, though most likely a close one.

This furnishes one instance of the possibilities of one Ayrshire herd of five cows in one year.

Allowing for the larger amount of milk given during the first months after calving, this brings us to the 5,000 pound cow for the cheese-making season.

As regards Holsteins lengthened tests have not been made in this country, owing to the recent introduction of the breed here. We are indebted to Smiths & Powell, of Lakeside Farm, Syracuse, N. Y., who claim to be the most extensive owners of this breed of cattle in America, for information in regard to them.

For some years past those gentlemen have kept records of their entire herd with the utmost care. In 1881 the herd of matured cows averaged 14,164 lbs. 15 ozs, and the two-year heifers 9,711 lbs. In 1882 the entire herd of eight three-year-olds averaged 12,388 lbs. 9 ozs. On April 1st, 1884, ten cows of this herd had made records of from 14,000 to 18,000 lbs. each, the average being 15,608 lbs. 6 3-10 ounces, which included every mature cow in the herd, that they had owned long enough to make a year's record, except one kept for family use. These represent glorious possibilities even though coming from choicest specimens of the breed.

No one will think of using the famous little Jersey in the cheese factory, but in the creamery we really cannot do without her. Thousands of Jersey cows make their stand and record of two pounds of butter per day, a story well accredited by the A. J. C. C. Register. Indeed, our townsman, Mr. Valancy E. Fuller, has demonstrated that the entire Stoke-Pogis family, so far as age has admitted of their being tested, come up to this standard, to say nothing of the almost

fabulous record of Mary Anne, of 36 lbs. 12¼ oz. in seven consecutive days, and 867 lbs. 14¼ oz. of butter in 11 months and 5 days. Not forgetting that there is but one Valancy E. Fuller and but one Mary Anne of St. Lambert, the thousands of standard Jersey cows in the United States and in other lands abundantly demonstrate the possibilities of this breed.

Then the Shorthorn as a dairy cow must not be hastily pushed aside. She is the only cow, so far as we know, that answers fairly well for both dairy and beefing purposes, yet allow me to ask whoever yet saw a very fleshy Shorthorn cow that was at the same time an abundant milker? It is just possible that the sooner the dairymen cease to make large account of the value of their pets as flesh-producers the better. Observation at least has taught us that large milk production and great flesh production at the same time are impossibilities.

The great question with dairymen is the *greatest value in milk, butter or cheese at the least outlay for keep*, and till some one will tell us which of the breeds will best fill the bill in this respect, we feel that we are yet in the alphabet of that book of research, that will one day answer this question. At the recent British Dairy Show in London, England, the champion prize (quantity and quality considered) as best milker was given to a Shorthorn cow not eligible for registration. Mr. F. M. Watson, of Roseville, Ill., has just called our attention to a record of 10,619 lbs., made by one of his Shorthorns in nine months, so that it is clear that this breed are no mean competitors for dairy honors.

The best breed of cattle for any purpose in the abstract, who as yet will take it upon himself to say? Then in regard to the beefing breeds who shall tell us which is absolutely the best? It would be correct to say that Shorthorns have hitherto proved themselves the general purpose breed in this country, but this does not determine that so it shall be always. Our experience here in other breeds has been somewhat limited, hence we dare not pronounce with absolute certainty how it shall fare with them in coming days. It may be that some of the new introductions will send the Shorthorns to the wall, or at least force them to share their stanchions. Some new breed may come upon the arena in the days that are at hand and take possession of the land.

The world still moves. Only yesterday we looked upon a new breed of fowls that are first being propagated in Ontario, and for which we expect a hopeful future. They originated in New England, and, along with John Dimon, the originator, have been removed to Walkerville, Ont. They are called the "Dillon Creeper," and are very beautiful specimens of the Plymouth Rocks, supported on the short legs of a duck without the web feet. We are thus reminded that in treating of the live-stock industry, we treat of a subject that is endlessly progressive, and in regard to which we should draw conclusions with the utmost caution.

Similarly as to the best breed for dairy purposes, we look upon that matter as undetermined. The man who takes upon himself to say that any one of the existing breeds is absolutely the best is certainly chargeable with temerity. It may be very proper to say that one breed *has* proved itself the best for butter production, and that another breed excels for cheese-making purposes, but that is different from saying that it is the best. Some of the dairy breeds have fallen into the hands of men of great enterprise and hence their capabilities have been more fully developed and more accurately ascertained than those of other breeds, while in nearly all the experiments and tests that have ever

been made, we have had no full account of the amount and kinds of feed given, which is a great misfortune. Hence, with all the testing and with all the advance that has been made, we are still floundering amid the sands of uncertainty, lured by what may prove a deceitful mirage. It is certainly important to know the possibilities of any breed or cross of dairy cattle in their individuality, but it is of far more consequence to ascertain their mean value for any purpose.

(To be continued.)

For the CANADIAN LIVE-STOCK JOURNAL.

### Improving the Quality of Our Butter.

The importance of an improvement being made in the quality of our butter cannot be too strongly impressed upon the butter-making portion of our dairymen. So important and necessary an article of diet should be a strong incentive to every producer to strive to have the best goods to place before his customers, in order that he may reap the largest possible profit for his labor. It is high time that some steps were taken of a public character to endeavor to show to the dairyman the great loss that is sustained in this branch of dairy husbandry by the poor quality and low standard at which our butter is estimated both at home and abroad; and the question may very naturally be asked, what steps would be the most practical to advocate to bring about this desirable result. We think more attention should now be given to this subject at our annual conventions than it has heretofore received. But even here is a difficulty, the cheese interest preponderating so greatly over the butter interest, the cheese producer looks upon it as secondary to his branch of the dairy business. We think there is no doubt that in the region where the conventions are held, cheese-making is the more profitable, and hence it receives the most attention at the conventions; and, as money making is the ruling principle that prompts the dairyman in the prosecution of his business, we can not blame him for giving that branch of his industry that pays him the best the largest share of attention. On the other hand we must have butter, and what we want is good butter, which, if the industry is intelligently prosecuted, is just as easily made as the poor stuff that is so extensively thrown upon the market, and for which we are called upon to pay an extreme price, as all the butter put upon the local market is by the various makers classed as A1, and woe to that man who ventures to criticise the quality. The art of butter-making is a simple operation, and when all the details in connection with its production are intelligently carried out, good butter will be the result, and good butter will always command a paying price; and if the producer could only realize the immense loss that is sustained by an inferior article being produced, he would pause in his operation and ask himself the question, How can I improve the quality of my butter? This same question could and has often been asked in reference to the cheese production before the introduction of the factory system. We well remember what the character of the cheese was at the time when the production was confined to the small dairy. Good cheese was the exception, now we may say it is the rule; and could the same system be applied to the butter product we should find a very gratifying improvement in the quality. The creamery system seems to us to be the only means by which this change can be brought about.

It will take a long time to effect much change in the private dairy. Butter made by a variety of persons will naturally be of a very varied character, and to attempt any innovation upon the time-honored system in use would require a patience that would put

even Job's meekness in the shade awaiting results. Could the butter-makers combine as the cheese-makers have done, and seek, through the dairy convention, for that enlightened knowledge the progress of the age is continually developing in every branch of business, we are satisfied most gratifying results would soon be attained. On these occasions we get the advanced ideas that are being developed by the application of science with practical knowledge, and the result would prove that simple as the art of butter-making is, cause and effect can be better understood by intelligent observation.

We say, then, let the butter-making interest urge upon the directors of the Dairymen's Association the desirability of making the butter interest a more prominent feature in the deliberations of the conventions.

Ingersoll.

C. E. CHADWICK.

### The Test of Mary Anne.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

In your last number of the JOURNAL, Mr. D. Nicol criticises the official test of this cow, basing his want of confidence in it on the ground that the committee having been appointed by the A. J. C. Club, the parties conducting the tests are "interested," and therefore the test cannot be considered "impartial." No attempt is made to show that the gentlemen were not fully capable of performing the duties they undertook or that ample means were not taken to prevent any inaccuracy or fraud, and consequently there can be but two grounds upon which the test can be impugned on the basis of Mr. Nicol's argument. First, that the parties conducting this test were acting in connivance with me to perpetrate a fraud upon the public; or, secondly, that the American Jersey Cattle Club appoint in these tests men who they know will wink at a fraud should one be attempted.

Let us first consider the composition of this committee. One of the gentlemen who conducted this test was Mr. Thomas Stock, of East Flamboro', for many years reeve of the township, and often warden of the County of Wentworth. Mr. Stock's record has been before the public for too many years, and his reputation for shrewdness and for integrity are too well established to necessitate at my hands a defence for him. He can hardly be considered an interested party, as he has always been known as a Shorthorn man, and does not hesitate to state that he had but little confidence in the ability of the Jersey cow to achieve in butter and in the consumption of food what was claimed for her, until his own experience of testing at Oaklands turned him from "a doubting Thomas" into a firm believer in their capacity to excel any breed in the world in butter making.

Mr. Walter Rutherford, of Wellington, N. Y., was the other gentleman on the committee. He is an elderly man, one who has in his own section of the country been prominently before the agricultural community of the United States for years, and enjoys the fullest confidence of the public as a man of ability, high Christian character and of the highest sense of honor.

That Mr. Stock can in any way be considered an interested party is beyond my comprehension. That Mr. Nicol would for one moment desire to convey the impression that either Mr. Stock or Mr. Rutherford would connive at a fraud I cannot believe, and yet when his reasons advanced are "boiled down," it must be upon this ground that he bases his request that the cow be placed in other hands for a further test.

The second ground is so intimately interwoven with the first that they must be treated as one. Permit me, however, for Mr. Nicol's information, to state that the American Jersey Cattle Club embraces in its membership many of the most influential and successful business men of the United States, well known for their business ability and probity. Amongst them are August Belmont, of New York; D. F. Appleton, one of the proprietors of the Waltham Watch Works; Major Alvord, Principal of the Houghton Experimental Farm, (and who conducted an official test at Oaklands), Erastus Corning, Albany, N. Y.; A. B. Darling, of N. Y.; E. B. Dinsmore, President; and (formerly the late) S. M. Shoe-

maker, Vice-President of the Adams Express Company; Ex-Governor Tilden; W. K. Vanderbilt, of N. Y.; John Hoey, treasurer Adams Express Co.; F. C. Havemeyer, of N. Y., head of the great sugar house of Havemeyer & Co.; Theo. A. Havemeyer his son, the manager; General Howland, Geo. L. Loillard; Hon. Henry L. Pierce, of Boston; Gen. Rathbone, of Albany; Wm. Rockefeller, President of the Standard Oil Company; D. Webb, President of the N. Y. Central Sleeping Car Company; and many others. Is it at all likely that these gentlemen would belong to an association which would be guilty of conniving at or passively standing by while anything in the nature of a fraud was being enacted? Is Mr. Nicol prepared to make such a charge?

Mr. Nicol will pardon my putting his argument into plain language, but that to my mind is the only deduction to be drawn from it.

As I intend to make this my last letter on this subject, I desire to point out to Mr. Nicol another ground which would prevent any "happy family arrangement" between Jersey breeders being consummated in this testing question. It is this. Each line of blood in the Jersey world is striving for the front rank, and there is very keen competition among the different families. As a rule the gentlemen sent to conduct tests by the club are those interested in other lines of breeding than that represented by the cow under test. It is not to "their interest" to facilitate any test of lines of blood other than those they are interested in, as each large test adds to the value of the particular line of blood of the cow who made it, and consequently depreciates their own line. Mr. Rutherford was not interested in any way in the St. Lambert line of breeding.

Finally, I would say that of the seven official tests I have had conducted at Oaklands, in nearly every instance the gentlemen in charge of them had little confidence before they began their work in the ability of the cows to make so large tests, and I know of my own knowledge that no men could have taken more pains, nor greater facilities could have been given them, nor could they have adopted greater safeguards to protect the duties they were called upon to perform, than did those gentlemen who carried on these tests.

I am quite satisfied with the value the public place on my stock, as evidenced by the demand which I have for it. I none the less appreciate the interest Mr. Nicol takes to "enhance the value" of it, and hope it is purely disinterested.

Many months since I publicly, on more than one occasion, stated my intention never again to permit Mary Anne of St. Lambert to undergo a forced test, as I know to the fullest extent the hazard there is in the future of the cow herself in thus forcing her, nor will I permit a cow, for which I have been offered and can take \$26,000, any time I ask, to go off my own premises; but any other test will be on grass alone or on ordinary feed. I think she has done her duty to me and the public in demonstrating her capacity. I feel that I have done all I can with reason be called upon to convince the public of the reliability of these tests, and if I have not produced sufficient to satisfy that public who takes an interest in them, I am alone the sufferer.

Mr. Nicol has fallen into a few errors in specifying the feed given, which could hardly be expected of an "impartial" critic.

He refers to her feed as "thirty-five to fifty pounds of rich meal in addition to roots, cabbages and apples, while at clover pasture." The feed as reported is 35 to 50 quarts, not pounds, a considerable difference when the preponderating feed was ground oats, weighing 10½ ounces to the quart, and which requires a stretch of imagination to classify as "rich meal." The report says she was also fed "a small quantity of roots and cabbages and a few apples," and "the cow was kept in a small pasture of withered clover—very poor feed—with no undergrass at all."

VALANCEY E. FULLER.

Oaklands, Hamilton, Ont., }  
July, 1885.

"When I have a surplus of stock for sale I shall not forget to use what I consider Canada's best live-stock advertising medium, the CANADIAN LIVE-STOCK JOURNAL. I can truly say that I am very favorably impressed with said journal."—John Dimon, Windsor Stock Farm, Ont.

## Poultry.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

### Poultry Notes for August.

BY J. W. BARTLETT, LAMBTON, ONT.

The growing chicks need much care and attention during the excessive heat of midsummer if the best results are to be attained. It is not enough to feed them once a day and let them take chances for water. This is one reason why so many people say fowls do not pay. The chicks require food not less than three times a day and an abundance of fresh water, or better still, milk, either sweet or sour; and unless they have unlimited range it is of great importance that they have plenty shade and ample ventilation as well. The early pullets, if pushed along well, will begin to lay in October, and if properly cared for will continue until well on towards spring, by which time they will have paid all they cost to raise them and a respectable sum besides. The surplus cockerels should have been disposed of before this, but better now than later on, especially if near a large city, as the same chick will fetch as much early in the season as a broiler as it will as a roaster in December, or at least so near it that it will not pay to keep it. For the pullets that are wanted for layers there is no food to equal wheat as a staple diet, but even this must be supplemented with soft feed once a day, such as stale bread soaked in milk, corn or oatmeal porridge, etc., and it is well to feed a light feed of fresh meat chopped fine twice or three times a week. Be sure to keep the houses clean during the hot weather, and if occasionally whitewashed they will be much healthier. The display of chicks will most likely be small at the fall shows, especially those which come early in September, as very few breeders were successful with their early chicks. Intending exhibitors should remember that everyone has late chicks this season, consequently all will be on an equal footing.

It is our intention to have one of the New Model Incubators in operation at the Provincial Fair at London. We expect to be situated in the poultry shed, where we will be pleased to meet old acquaintances as well as new ones, with all who are interested in poultry. If no mishap befalls the machine and eggs in transit from our own place at Lambeth to London, a distance of five and a half miles, we expect to be able to show our friends the downy orphans in the act of breaking the shell.

### Diseases of Poultry and their Cure.

Continued from June JOURNAL.

One of the most important duties of the poultry-keeper should be to keep the poultry and houses free from parasites. I think I can safely class these pests of the feathered tribe under the head of poultry diseases, for there is nothing that will so effectually stop the supply of eggs or reduce the vitality of the fowls as a swarm of chicken lice. They worry and harass their victims to the verge of death, and suck the juices out of their flesh and feathers, and cause serious derangement of their health. Everyone who has kept fowls is aware how pernicious and insidious are the assaults of these little pests of domestic poultry, and will corroborate the above statement. If you would have your birds happy, healthy and profitable, keep these parasites away. If, on examination, you find that they have a foothold in your hen-house, then go right to work and stamp them out. No half-way measures will do. Pull off your coat, roll up your sleeves and brace yourself for a big battle with the hosts of the enemy.

First thing to be done, remove all the old roosts, nests, coops ; clean up the floor and remove all filth ; drive out the fowls ; then take an iron pot and place in it four pounds of sulphur ; stop up securely all crevices and apertures ; light the sulphur and leave the house closed for about three hours ; then take good fresh lime and make a wash. To each gallon of the wash add one gill carbolic acid and two ounces of sulphur. Lay this wash on without stint, and throw it into the cracks and crevices. If once going over is not enough, then go over it again. Put in new roosts and nest-boxes, and give them a coat of the wash also. If you wish to fumigate the fowls, I have found the following plan (recommended by Stoddard) a good one. Take an old wooden pail, make a half inch hole one inch from the brim ; cut out the half-inch piece to the brim and smooth the edges of the slot, grease a pine splinter and sprinkle it with sulphur and burn it under the inverted pail ; put the bird under quickly with head through the slot, and hold the pail down firmly for about ten minutes ; take the fowl out and you will find that the lice are all killed. Another good plan is to rub coal oil thoroughly into the feathers of the bird. The roosts and nest-houses should be frequently sprinkled freely with coal oil. To keep your fowls clean and free from insects it is absolutely necessary that they should have a dust bath, which is just as grateful to a fowl as a water bath is to a human creature. A good dust bath can be made as follows : Make a box three feet square, ten inches deep, and fill it with dry earth, or, better still, with road dust ; be sure that there are no stones in it to hurt the fowl. Thoroughly mix with the dust two carbolated powders ; place the box in a sunny spot in the house and it will do you good to watch the fowls enjoy this to their great luxury. Now is the time to lay in a winter stock of dry road dust.

THOS. GAIN.

East Hamilton Poultry Yard.

P. S.—Anent friend Bartlett's cure for roup and cholera, I might just say that the same cures do not work the same in all cases. Such simple remedies as the ones mentioned by him are often very effectual, still severe cases require severe treatment.

I have heard a great many complaints from poultry-keepers throughout Ontario this season, who speak of poor success in hatching and raising chicks. Perhaps Mr. Bartlett will give us his experience this season ; also his idea of the cause of certain seasons being what we might call " off " years.

T. G.

### Judges on Poultry at the Toronto Industrial Exhibition.

A meeting of the poultry committee of the Industrial Exhibition Association was held at Toronto on July 20, to appoint judges for the next exhibition in the poultry department. Among those present from outside associations as delegates were Messrs. A. Bogue and W. McNeil, of London ; Thos. H. Crowie, of St. Catharines ; Dr. J. G. Scott and O. C. Wilson, of Seaforth ; W. Sanderson and W. Woodcock, of Stratford. The following judges were appointed :— On Brahmas, Cochins, Langshans, Dorkings, Plymouth Rocks, Javas and Wyandottes, Mr. W. Buck, of Brantford. On Game :—Hamburgs, Leghorns, French, Spanish, Polands and Bantams, Mr. S. Butterfield, of Amherstburg. On Turkeys, Geese and Ducks, and the ornamental class, Mr. W. H. Doel, of Doncaster. On Pigeons, Mr. W. O. Weldon, of Tempo ; and of Poultry Appliances, Messrs. A. Bogue, of London ; and C. Bonnick, of Toronto. It was decided to appoint as members of the committee,

delegates from the Bowmanville Poultry Association. The meeting was very harmonious, and all present agreed that the prospects for the coming Industrial Fair, and especially the poultry department, were better than in any previous year.

### Wheat as a Food for Hens.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—In reading your paper I find where " J. F. " has had no luck hatching chickens from wheat-fed hens. I have fed my hens scalded wheat bran, morning and night, and at noon wheat screenings, and they have laid well. Out of 90 eggs they hatched 84 chicks ; But with my turkey eggs I have had no luck ; only 4 have hatched out of 36 eggs. If any one can give me any information about turkey raising I would like to hear from them.

Yours respectfully,

JOHN SAGER.

Cobbam Park, Warren, Pa.

Will some of our readers please answer ?

### The Apiary.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

### The Management of Bees Two Thousand Years Ago.

FROM THE GEORGICS OF VIRGIL.

(Continued from last Number.)

" And here, indeed, were I not just furling my sails, at the last period of my labors, and hasting to turn my prow to land, perhaps I might both sing what method of culture would adorn such gardens, and the rose-beds of twice blooming Pastum ; and how endive and verdant banks of parsley delight in drinking the rills, and how the cucumber, winding along the grass, swells into a belly. Nor had I passed in silence the late flowering daffodil, nor the stalks of the flexile acanthus, nor the pale ivy, and the myrtles that love the shores. For I remember that under the lofty turrets of Oebalia, where black Galesus moistens the yellow fields, I saw an old Corycian who had a few acres of neglected land ; nor was the soil rich enough for the plough, nor proper for stocks, nor commodious for vines. Yet here among the bushes, planting a few pot-herbs, white lilies, vervain, and esculent poppies all around, he equalled in a contented mind, the wealth of kings, and returning late at night, loaded his board with unbought dainties. The first to gather the rose in spring, and fruits in autumn ; and even when sad winter now split the rocks with cold, and bridled up the current of the rivers with ice, in that very season, he was cropping the locks of the soft acanthus, chiding the late summer, and the lingering zephyrs.

" He, therefore, was the first to abound with pregnant bees, and numerous swarms, and to drain the frothing honey from the pressed combs. He had limes and pines in great abundance, and as many fruits as the fertile tree had been clothed with in early blossom, so many it retained ripe in autumn. He, too, transplanted into rows the late far-grown elms and hard pear trees, and sloe-trees, now bearing damsons, and the plane, now ministering shade to drinkers. But these, I for my part, waive, restrained by the narrow bounds I have prescribed myself, and leave to others hereafter to record.

" Come, now, I will unfold the qualities which Jupiter himself has implanted in the bees. For which reward accompanying the shrill sounds and tinkling brass of the Curetes, they fed the king of heaven under the Dictæan Cave. They alone, of all the animal creation, make their young the public care, share the buildings of a city in common, and pass their lives under inviolable laws ; and they alone have a country of their own, and a fixed abode. Mindful of the coming winter, they experience toil in summer, and lay up their acquisitions into the common stock. For some are provident for good, and by fixed compact are employed in the fields ; some within the enclosure of their hives lay Narcissus' tears, and clammy gum from bark of trees, for the first foundation of the combs, then build into arches the viscid wax ; others bring up to their full growth the young, the hope of the nation ; others condense the purest honey, and distend the cells with liquid nectar. Some there are

to whose lot is fallen the watching at the gates, and these by turns observe the waters and clouds of heaven ; or receive the loads of those who return, or forming a band drive from the hives the drones, a sluggish generation. The work is warmly plied, and the honey smells fragrant of thyme.

" As when the Cyclops urge on the thunderbolts, from the stubborn masses, some receive and render back the air in the bull-hide bellows, some dip the sputtering brass in the trough ; Etna groans under the weight of their anvils. They alternately with vast force lift their arms in time, and turn the iron with the gripping pincers. Just so, if we may compare small things with great, the innate love of gain prompts the Cecropian bees each in his proper function. The elder have the care of their towns, and to fortify the combs, and frame the artificial cells. But the younger return fatigued late at night, their thighs laden with thyme ; they feed at large on arbutes, and grey willows, on casia, and glowing crocus, on the gummy lime and purple hyacinths ; all have one rest from work, all one time of labor. In the morning they rush out of the gates without delay. Again, when the evening at length has warned them to return from feeding in the fields, then they seek their habitations, and then refresh their bodies. The drowsy hum arises, and they buzz about the borders and entrance of their hives. Soon after, when they have composed themselves in their cells, all is hushed for the night, and then proper sleep seizes on their weary limbs. Nor remove they to a great distance from their hives when rain impends, nor trust the sky when east winds approach ; but in safety supply themselves with water all around under the walls of their city, and attempt but short excursions ; and often take up little stones, as ursteady vessels do ballast in a tossing sea ; with these they poise themselves through the void airy regions.

" Chiefly you will admire this custom peculiar to the bees, that they neither indulge in conjugal embrace, nor softly dissolve their bodies in the joys of love, nor bring forth young with a mother's throes. But the individuals spontaneously cull their progeny with their mouths from leaves and fragrant herbs. They themselves raise up a new king and little subjects, and build for them new palaces and waxen realms.

" Often, too, in wandering among the flinty rocks they have torn their wings, and voluntarily yielded up their lives under their burden ; so ardent is their passion for flowers, and such their glory in making honey. Therefore, though they themselves be limited to a narrow term of life (for it is not prolonged beyond the seventh summer) yet the immortal race remains, and for many years the fortune of the family subsists, and they count grandsires in a long series of generations.

" Besides, not Egypt's self nor great Syria, nor the nation of the Parthians, nor Median Hydaspes, are so obsequious to their king. Whilst the king is safe all live in perfect harmony ; when he is dead, they dissolve their union ; they themselves tear to pieces the fabric of their honey and demolish the texture of their combs. He is the guardian of their works ; him they admire and all encircle him with thick humming and guard him in a numerous body. Often they lift him up on their shoulders ; in his defence expose their bodies in war, and through wounds seek a glorious death.

" Some, from these appearances, and led by these examples of sagacity, have alleged that there is in bees a portion of the Divine mind, and heavenly emanation. For that, the Deity pervades the whole earth, the tracts of sea and depth of heaven. That hence the flocks, the herds, men and all the race of savages, each at its birth derive their slender lives. Accordingly that all of them when dissolved, return hither hereafter ; nor is there any place for annihilation ; but they mount up alive, each into his proper order or star, and take their seat in the high heaven.

" What time you are to rifle their august mansion, and their honey preserved in their treasures, and their honey preserved in their treasures : First, gargle your mouth with a draught of water, and squirt it out upon them, and carry in your hand before you persecuting smoke. Twice they press the teeming cells. There are two seasons of that harvest ; one as soon as the Pleiad Taygette has displayed her comely face to the earth, and spurns with her foot the despised waters of the ocean ; or when the same star flying the constellation of the watery Fish, descends in sadness from the sky, into the wintry waves, they

are wrathful above measure, and when provoked infuse venom into their stings, and leave their hidden darts fixed in the veins, and lay down their lives in the wound.

"Yet, if you are afraid of a hard winter, you ought to spare their future nourishment, and have pity on their drooping spirits, and afflicted state. But who would hesitate to fumigate their hives with thyme, and cut away the empty wax? For often the lizard preys unseen upon the combs, and the vacant cells are stuffed with grubs that shun the light; the drone also, that sits exempt from duty at another's repast; or the fierce hornet has engaged them with unequal arms; or the moth's direful breed; or the spider, hateful to Minerva, has suspended her loose nets in their gates.

"The more they are exhausted, the more vigorous will they all labor to repair the ruins of their decayed race, to fill up the cells and weave their magazines of flowers. But seeing life has on bees too entailed our misfortunes, if their bodies shall languish with a sore disease, which you may know by undoubted signs; immediately the sick change color; horrid leanness deforms their countenance; then they carry the dead out of their houses, and lead the mournful funeral processions, or clinging together by the feet, hang about the entrance, and loiter all within their houses shut up, listless through famine, and benumbed with concentrated cold. Then a hoarse sound is heard and in drawing hums they buzz: as at times the south wind whispers through the woods, as the ruffled sea murmurs with the reflux waves; as rapid fire in the pent furnace roars. In this case now I would advise to burn gummy odors, and to put in honey through pipes of reed, kindly tempting and inviting the drooping insects to their known repast. It will be of service also to mix with it the juice of pounded galls and dried roses, or wine thickened over a strong fire, or raisins from the Pnythian vine, Cecropian thyme, and strong smelling centaury. There is also in the meadows a flower to which the husbandmen have given the name of Amellus; an herb easy to be found, for from one root it shoots a vast luxuriance of stalks, itself of golden hue, but on the leaves, which full thick are spread around, the purple of the dark violet sheds a gloss. [The plant here described is the Astar Atticus, or purple Italian star-wort.—ED.]

"But if the whole stock shall fail any one on a sudden, and he shall have no means to recover a new breed, it is time to unfold the memorable invention of the Arcadian master, and how the tainted gore of bullocks slain has often produced bees. I'll disclose the whole tradition, tracing it high from its first source. For when the happy nation of Pellæan Canopus inhabit on the banks of the Nile, floating the plains with his overflowing river, and sail around the fields in pointed gondolas; and where the river, that rolls down as far as from the swarthy Indians, presses on the borders of quivered Persia, and fertilizes verdant Egypt with black slimy sand, and pouring along divides itself into seven different mouths, [So in Virgil's time, but now only two mouths.—ED.] all the country grounds infallible relief on this art. First a space of ground of small dimensions, and contracted for this very purpose, is made choice of; this they strengthen with a narrow tile roof and confined walls; and add four windows of slanting light from the four winds. Then a bullock, just bending the horns in his forehead, two years old, is sought out; whilst he struggles exceedingly, they close up both his nostrils and the breath of his mouth, and having beaten him to death, his battered bowels burst within the hide that remains entire. When dead they leave him pent up, and lay under his sides fragments of boughs, thyme and fresh casia. This is done when first the zephyrs stir the waves, before the meadows blush with new colors, before the chattering swallow suspends her nest upon the rafters. Meanwhile the juices warmed in the tender veins ferment; and animals, wondrous to behold, first short of their feet, and in a little while buzzing with wings swarm together, and more and more fan the thin air, till they burst away like a shower poured down from summer clouds, or like an arrow from the whizzing string, what time the Parthians first usher in the fight.

"What god, ye muses, what god disclosed to us this mysterious art? Whence took this new experience of men its rise?"

The poem concludes with the charming episode of Aristæus recovering his bees, supposing the whole breed lost, wherein Virgil again refers to the opinion

of antiquity, that bees were produced from the "tainted gore of bullocks slain," which we have shown to be justly exploded by the bee-keepers of the present age. But this would take up too much of the valuable space in the JOURNAL, and we will therefore only further say, that Virgil was one of the best and wisest men of his time, and in such popular esteem that one hundred thousand Romans rose up when he came into the theatre, shewing him the same respect they did Cæsar himself. Just before his death, it is said, he wrote the inscription on his monument, which our author says does him the more honor, as it savors not the least of ostentation.

"I sung flocks, tillage, heroes. Mantua gave me life, Brundisium, death; Naples, a grave." J. S.

### Modus Operandi of Curing Foul Brood.

PRACTICED BY D. A. JONES, OF BRANTFORD, ONT.  
(Communicated.)

Having now sufficiently described the disease so that the merest novice should be able to detect it; also why the various operations should be performed, it will now be in order to describe the process that we usually adopt, which makes success certain every time. You must first have the necessary tools to operate with; a smoker and fasting box (or a hive with a screen to fit over top). With smoker in hand, go to the hive which you wish to operate on. If there is no brood in the hive, or if you do not care to save the brood, you then smoke and drum the bees until they all fill themselves with honey; as soon as they are filled, they must be shaken out into the box you intend them to occupy in fasting. A better way is to lift the hive off the stand and set the fasting box in its place; then when the bees are shaken down into this box those that take wing will come in more readily. Place the comb in an empty hive, then by turning the hive upside down, and striking it on the ground the bees will pass up into the fasting box; when all the bees are in, place a wire screen over the top, close the entrance, carry them to some dark repository (a cellar if possible), setting the hive down and turning it over on its side, by this means what was formerly the top of the box becomes the side, and the bees will cluster on the upper side of the box, thus allowing the air to pass through the screen. They may remain in this dark repository hanging in a cluster similar to a swarm, until they show signs of hunger, which is easily perceived. As the food in the abdomen is gradually consumed the cluster becomes smaller; the bodies of the bees also look smaller, a few bees, say a hundred or so, will fall to the bottom board, crawling about in a slow quiet manner, indicating their starving condition (if they are well filled with honey when placed in the fasting box, they are likely to require from four to six days fasting). They may be removed, but if removed before all the honey is consumed in their abdomens great difficulty is likely to arise. They must be watched very carefully, (say three times a day after the third day), because after the honey in their abdomens, is all consumed, they are able to die very quickly. Take them out, have your hive prepared where you wish them to remain; place in it some comb, then shake the bees down in front, and allow them to run in just the same as you would a swarm. If there is no food in the combs, they should be fed, as they will be too weak to gather honey, but after being fed they will go to work the same as a swarm, in a few days, if the flow is good. The combs should now be melted into wax, and the hive and frames boiled for ten minutes, to disinfect them. If there is any honey in the combs it may be extracted and boiled for ten minutes, when it will do for food; but a little water should be put into the honey before boiling (about one pound of water to five pounds of honey). Should there be brood in the combs, and you would prefer to save it, you should leave enough bees in the colony to take care of the brood; the queen should always be taken with the bees the first time. Then as soon as the brood hatches out of the combs, the bees must be shaken out into the fasting box and treated the same as the first lot. Should you have a number of colonies diseased with foul brood it is better to go over all the hives and put all the combs containing brood into hives by themselves; all others may be melted up at once. This will reduce the number of colonies

considerably, making some which may be fasted at once, and then along as the brood hatches out bees may be shaken from one or more colonies into the fasting box, and then put through the same process; as soon as the combs are free from brood they may be removed for treatment as prescribed. By continuing this process one or two hundred colonies could be purified and put to work in clean hives in a few weeks, and all by one person, the only loss occurring being the labor required and the time spent in fasting which would otherwise be employed in gathering honey. When it is done between honey-flows, there will be no loss from the latter, but the operator must be careful to see that the bees do not lack stores. It could also be done in the fall after the honey-flow is over; the bees must then be fed on sugar syrup, which is the best stores for winter. Destroying colonies afflicted with foul brood by fire or otherwise we consider a wanton destruction of property.

### Horticultural.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

#### A Woman's Help in Horticulture.

We are happy to know that there is in our progressive horticulture and in its many and varied operations and services many fine opportunities for the exercise of feminine skill and ability, so that none need be turned idly away. Here there is room for all who may apply, and the rewards are gratifying and pleasant. We would beg to specify as peculiarly fitted for the delicate and fine operations of feminine hands the following as amongst the many valued

#### SERVICES SUITABLE FOR WOMEN

to do. Light weeding or cleaning young plants, both vegetable and flower, when it can be done with a light hoe, will be found a not overly burdensome service for them to do during the early spring and summer months. Dressing, training, and staking and labelling plants on the borders and beds, either vegetable or flower, are duties peculiarly adapted to their hands, as this work readily calls forth their skill and intelligence in daily action. Again, in vineyard work trellissing, tying up, training and pruning the vines, and bringing out their best results in large, handsome bunches of beautiful fruit, are works peculiarly fitted and enjoyable to them during the summer months. There are thousands, even in this country, of bright, active and intelligent females, that if the example was once set them, as it is in older countries, would be delighted with this sort of work, and would be far happier and better for doing it in our gardens and vineyards, than elbowing each other for places either in the kitchen or in the factory shops in over-crowded cities. We believe also that the moral aspect of the question will commend itself to the better judgment of the reflective. But, again, it is well known the high estimate that is generally placed upon feminine service as fruit-pickers. Here they have the entire preference, and they have the happy faculty of making it very pleasant and profitable. A small fruit-grower told us a short time ago, in answer to his inquiries respecting his help in picking, that he employed mostly women and girls for his strawberries and raspberries; that he greatly preferred their services to that of boys or even men; that they were more constant and steady and reliable in their work, and that the results gave better satisfaction to him and his market, as the quality of the fruit in the boxes was more uniform and better selected, and less injury had been done to the plants. He found that their boxes, on account of the careful picking, had always a better appearance, and the baskets could be at once turned on to the market without any further examination. He found, too, that they would do more work in a day on account of their steady efforts, and as they were paid

so much per basket, they were encouraged in earning good wages. We were glad of this testimony, and we thought this well-deserved praise that our well-disposed females will do well to take notice of.

In gathering and picking other fruits, as peaches, plums, cherries and grapes, those finer and more luscious samples of our rich fruit products, female hands are the best hands that can be had for the purpose, and will give the best satisfaction both to the grower and shipper. It is well known how careful is the manipulation required on these fine and tender fruits, and the rough hands of boys or even men sometimes bruise them, and spoil their fine appearance for the market. In our large seed establishments during the winter months female labor is very largely employed very pleasantly and profitably in the assorting, the preparing, and the packing of the seeds. The dexterity and skill with which a company of girls are trained to do this work is perfectly astonishing, and almost past comprehension to the uninitiated. Again, as wreath and bouquet-makers their pre-eminence is at once acknowledged and undisputed. In this department of public and family service the qualifications requisite are a fine taste and good knowledge of form and combinations of color. The higher the attainments the better the work and more valuable the results, as perfection here is entirely a matter of taste on the part of the operator. In this there can be no competition with men, as they have neither the patience nor the skill to dispute their sisters' right of acceptable service.

But valuable in all these varied departments of our rural industries as is friendly feminine helpfulness, it is nevertheless in the home and its surroundings and essential enjoyments that woman's chief and most appreciative sphere of usefulness lies. How many a beautiful growing tree and gay and handsome flower plot on many a lovely and well-kept lawn surrounding the family home with attractive grace and beauty, do we owe to feminine influence and help! We know her power here is past computation, and her influence for good everywhere noticeable. We may not lightly esteem or pass by as a matter of course those rich and varied delicacies that daily come upon our tables in the shape of well provided preserves, jams, and marmalades in their endless make-ups from our fruits.

Talk about preserving factories, canning factories, or drying factories, and their superb products, but give us a can of fruit that flavors strongly of home and appreciated feminine services, and to our taste it has the proud preference and ever will. Her fine perception and her skillful knowledge and attainments will in every case give a ready demand for the products and works of her hands. But again, as table setters and decorators, if you please, at one of our horticultural banquets, such as we sometimes have, what would the whole amount to without the ready skillfulness of feminine hands? If ever the finishing touches of a scene adds grace and beauty to its whole aspect, it is at one of those beautiful banquetting halls and tables fitted out and planned by feminine hands, and which prompt our great admiration and our meed of highest praise. But I might go on thus indefinitely, as this theme is one of widening and commanding aspect. Enough has been said to place the matter clearly before us and to express our conviction that there is still more room for the exercise of feminine help in our horticulture.

"The copies of your journal are like the people of Canada—the more I see of them, the better I like them."—C. Lott, North Warren, Pa.

## The Home.

FOR THE CANADIAN LIVE-STOCK JOURNAL.  
Eve.

BY MRS. HANEY.

O dear little Eve, O poor little Eve,  
How sad, indeed was your state,  
When you stood, with your tender naked feet,  
Outside of the garden gate.

Remember I don't want to screen you a bit.  
When everything else was your own,  
You might for your own sake, if not for mine,  
Have left that tree alone.

But I won't say too much, tho' you've made me drink,  
Thro' life, such a bitter cup;  
For the best of us all might have done the same,  
With no mother to bring us up.

And I'm sure you had a hard enough time,  
Without any fault being found,  
When you settled down without any house,  
And no other families around.

How did you cook without pots and pans?  
Or sleep without any bed?  
And how did you manage to sew at all  
Without any needles and thread?

How did you feel when Sundays came,  
With no nice dresses to wear?  
And not so much as a brush and comb  
To smooth out your long, loose hair?

What did you do in the evening time,  
When Cain began to cry,  
With no warm cradle to rock him in,  
As you sang your lull-a-by?

And when the little fellow got sick  
And you took him on your knee,  
What did you do for a cup and spoon  
To give him his catnip tea?

How dull when Adam came back from work,  
And you sat down without any chairs,  
With no books, no papers, nor even a chance  
To talk over your neighbor's affairs.

I dare say things brightened up a good bit,  
After a few hundred years,  
But the worry and fret you had at the first  
Must have given us our birthright of tears.

O, Eve, little Eve, if you only had known,  
Who it was that tempted you so,  
You'd have kept out of mischief nor lost your nice home,  
For the sake of an apple, I know.

But I won't be too hard, 'twould scarcely be fair,  
Since we all like to have our own way,  
And those who most blame you, I feel very sure,  
Are far greater sinners to-day.

CAISTORVILLE, ONT.

GETTING into debt is like going down a hill—the farther one goes the faster, owing to the momentum that constantly accumulates; therefore, beware of the first debts incurred. At the outset one usually becomes fidgety at the thought of the responsibility that rests upon him, but the mind becomes gradually habituated to this state of things as to anything else, until the individual soon gets into this way of doing business, as a matter of course. Thus the burden accumulates like the load of a stage-driver calling at the different outposts of a city till it becomes more than he can carry. Then follows repudiation and a wrecking of moral principle beyond the likelihood of repair. The man in debt labors at a tremendous disadvantage. The load he carries weighs him down like a water-logged vessel, and is most destructive to that buoyancy of spirit which gives one heart to grapple with the difficulties of life. He can neither take advantage of the discount for cash in purchasing, nor of improved markets in selling. He is compelled to buy at certain places where he gets credit and to sell at the fiat of his creditors. One correspondent, writing on

the condition of "the majority of renting farmers," in June number of the JOURNAL, has put it nicely when he says, "It is better to run no bills, if possible. To avoid it we should do without what we cannot pay for, if we possibly can." The adoption of this rule would keep most men out of debt, for we can do without many things when we make the effort.

## A Curious Comparison.

(Communicated.)

The comparisons below, between the farmers of Mains, in Angus, Scotland, in 1790, and their mode of management in 1760, were made by Rev. C. Peebles, in his statistical account of Mains, who gives the following few points, among many, which may interest your readers:

1760.

Land ploughed with oxen. Only a few horses kept to draw the harrow in seed time, and bring in the common harvest. £7 thought a great price for a horse.

Land rented at 6s. per acre, and only two small farms enclosed.

No English cloth worn but by the minister and a Quaker.

Men's stockings were what were called plaiding hose, made of woollen cloth. The women wore coarse plaids. Not a cloak nor a bonnet were worn by any woman in the whole parish.

Only two hats in the parish: the men wore cloth bonnets.

There was only one 8-day clock in the parish, six watches and one tea-kettle.

The people never visited each other but at Christmas. The entertainment was broth and beef, and the visitors sent to some ale-house for five or six pints of ale, and were merry over it without any ceremony.

Every person in the parish, if in health, attended divine worship on Sunday, which was regularly and religiously observed.

Few were guilty of any breach of the third commandment.

1790.

Oxen not employed in agriculture. Farmers have their saddle horses, worth from £24 to £30, and work horses from £20 to £25 each.

Land at 30s. per acre, and all enclosed with dykes and thorn hedges.

There are few who do not wear English cloth, and several the best superfine.

Cotton and thread stockings are worn by both sexes, masters and servants. Some have silk ones. The women who wear plaids, have them fine and faced with silk. Silk plaids, cloaks and bonnets are very numerous.

Few bonnets are worn, and the bonnet-makers' trade is given up.

Thirty clocks, one hundred watches and above sixty tea-kettles.

People visit each other often. Six or seven dishes are set on the table, differently dressed. After dinner a large bowl of rum punch or whiskey toddy is drunk—then tea, then another bowl, then supper, and after that the grace cup.

Much lukewarmness prevails with regard to religious instruction, and a consequent indifference to worship and ordinances.

The third commandment seems to be almost forgotten, and profane swearing greatly abounds.

## Welcome Visitors

For the month these are:

*Holstein Cattle.* This neat little pamphlet of 135 pages is a compilation of articles on Holstein cattle, by Dudley Miller, inspector for "The Holstein Breeders' Association of America," Oswego, N. Y. The abundant travels, and long study of this breed in their own land, eminently qualify the author for the execution of such a work, which he has done very creditably. In this country where so little is known regarding the breed, and where so much is wanted to be known, parties will find it money well spent to forward to the author 50 cents and get the book.

*Foul Brood, its Management and Cure,* by D. A.

Jones, Beeton. The author of this little pamphlet has gone into the subject with his usual energy, and after having shown in the plainest manner the tokens of the disease, the mode of cure is given. This will be found in the apary department of the present number.

*Manitoba Crop Bulletin*, No. 10, for June, issued by the Department of Agriculture. It speaks of a very favorable seeding time. In Turtle Mountain and Souris it commenced in March. There is much fallowing done to destroy weeds. While fall wheat will not stand the winters, spring wheat looks excellent. Oats are promising. Twelve thousand eight hundred and seventy-five acres are devoted to growing flax. Not much rye, buckwheat, field beans or corn, is grown. There is a large increase in the acreage of wheat and oats.

The Ontario Agricultural College Calendar for 1885-1886. Copious notes will be given in September issue of the JOURNAL. We only stay to notice now that new students are admitted October 1st, and that the calendar can be obtained by addressing a card to James Mills, Esq., President of the College.

### Increased Premiums at Provincial Show.

Since going to press the following has been received regarding the Provincial Show :

About fifty per cent. has been added to the regular prizes on horses, besides a liberal allowance of Dominion gold and silver medals. In the cattle classes a class for Canadian-bred animals has been added for Shorthorns. A herd prize of \$100 is offered in each class for best bull and four females ; also a number of medals. In the sheep classes a considerable increase is made in the regular prizes, and flock prizes of \$25 each for both Canadian-bred and for imported animals. In the classes of pigs, herd prizes of \$25 each are offered. In all about \$5,000 has been added to the prizes in live-stock, besides considerable increases on agricultural products, implements, etc.

An appropriation was also voted for a practical working dairy to be conducted on the ground by Professors Brown and Barre of the Agricultural College, in which the centrifugal system of separating cream from milk and making butter on the most improved methods will be illustrated.

A supplementary prize list will be issued with the least delay possible, and will be mailed on application to Mr. Henry Wade, Secretary, Toronto.

### Jottings.

At the Bath and West of England show, Mr. Price's group of Herefords carried first honors in a Sweepstakes prize.

The famous Clydesdale mare Moss Rose has recently been purchased by Mr. Gilmour, of Montrave, Fife, for 1000 guineas, the highest price ever paid for a Clydesdale female.

At the Colonial and Indian Exhibition to be held in London in 1886, the Dominion is to have 54,000 square feet of space allotted to it. Our Government has voted £10,000 toward the Canadian exhibit.

It seems that 2d. per pound is realized on mutton by those who supply it in New Zealand for the dead meat trade, and 3d. the cost of shipment, so that consumers in England may purchase at about 5½d. per pound.

MESSRS. McDONALD, FRASER & CO., live stock salesmen, selected five superior specimens of Aberdeen-Angus Polled heifers for the Messrs Dawes, of Lachine, at their request. They came from the herds of Aityre and Bunchrow.

An experiment carried on at Rothamsted last winter has made it plain that red clover silage fed to fattening bullocks along with cake and meal is quite equal for producing beef to feeding them dry clover chaffed, along with roots, cake and meal.

THE number of cows in Great Britain in 1884 were 1,356,000. The number of cattle, 4,112,000. The percentage of cows was therefore 32.9. In the last fifteen years the increase in the number of cows has been but 100,000, while in the same period the population has increased 5,000,000.

A GOOD deal has been said of late in the British agricultural press regarding the wisdom of selling cattle by live weight. We are glad indeed to see our friends in the old world copying after us in this respect, also cattle here for shipping purposes have been bought and sold in this manner for years past.

THE Ayrshire cow Duchess of Smithfield 4256 has been recently tested officially. Besides grass, she was fed from nine to twelve quarts of bran, from four and a half to six quarts of corn meal, nine quarts of ground oats, and from three to four and a half quarts of oil meal. She gave in seven days 463¾ pounds of milk, which churned 19 pounds 6 ozs. butter.

At the Royal Counties' Agricultural Society's Show, at Southampton, the Hampshire Downs came well to the front. Mr. R. F. Moore's ram lamb carried off the champion prize for the best ram of any breed in the show. Mr. Pars's first prize shearing ewes and Mr. Pain's first prize ewe lambs deservedly attracted much attention. We surely have abundant room for more of this breed in Canada.

MR. A. NICOL, a son of D. Nichol, Esq., of Cataraqui, is farming extensively at Kio Lang, in far away China. The company with which he is connected will import steam ploughs next winter, also heavy stallions to improve their stock of horses. In a home letter Mr. Nicol penned the following sentence: "I get the CANADIAN LIVE-STOCK JOURNAL, and am well pleased to think that Ontario has such a paper."

THE investigations of the commission in England in reference to the value of ensilage have examined a good number of witnesses, many of whom are decidedly in favor of its use on the ground of economy, profit and on other grounds. There are some, however, who have said that the commission were most careful to summon only those whom they knew to be favorable to its use, and thus the undetermined puzzle continues to be played.

FROM the *Country Gentleman*, of July 16th, we glean that the total yield of nineteen of the principal wheat-growing states in the Union is estimated at 250,054,000 bushels. These nineteen states have, on an average of the last five years, furnished 412,000,000 bushels, out of the entire total for the Union of 457,000,000 bushels. It is stated on good authority that the total wheat crop of the United States this year cannot be more than 300,000,000 bushels.

THE judgment of the Court of Common Pleas Division, as delivered recently by the Lord Chief Justice, states that the practice of dishorning cattle is not illegal, skilfully performed. The *Farmers' Gazette*, of June 27th, is down on the practice, and in a leader on the subject, puts in a most earnest remonstrance. With the *Gazette*, we are glad to hear that some sturdy Scotch feeders are refusing to bring cattle from Ireland that are dishorned. We look upon the practice as a stain upon the advanced civilization of Ireland.

THE late Mr. Bowie, Mains of Keely, was a distinguished breeder of Aberdeen Angus Polls. He is placed by some as second only to Mr. McCombie, of Tillyfour, and Mr. Hugh Watson, as an improver of the herd. The cattle plague of 1865 gave the herd a blow from which it never fully recovered, although it has produced many fine animals since. The herd was formed by his father in 1809 or 1810 by the purchase of the cow Boysock from Henry Lindsay Carnegie, of Kimblethmont. Mr. Bowie, was the breeder of the famous prize winning bull Cup-bearer 59, Standardbearer 229 and Hauton 228.

THE third volume of the Flock book of Shropshire sheep is already out. It contains the pedigrees of 627 rams, which carries out the numbers from 1818 to 2445. It contains a list of sires in use in the principal flocks, and is handsomely illustrated with several portraits of recent prize winners, and contains in addition an essay on the breed by Mr. Alfred Mansell. The conditions of entry for Vol. IV. are: (1) No ram shall be eligible for entry unless the name of the sire be given, except in such instances where the sire is already entered in the flock book. (2) No ram is eligible for entry whose sire and sire of dam cannot be proved to be pure bred Shropshires. After the issue of the fourth volume, the name of the sire of dam, in addition to the name of the sire, will be required. The breeders of Shropshires are indeed showing much enterprise in their work.

MR. Philip Le Broc, Broughton Lodge, St. Marys, Jersey, writing in the *London Live-Stock Journal* of June 12th, says: "I was wonderfully struck this spring with the splendid Jersey herds I saw both in the States and in the cold climate of Canada. The Oaklands herd, the home of the famous Mary Ann of St. Lambert, the property of Mr. V. S. Fuller, of Ontario, consisting of about 150 head, was a sight worth seeing, and every improvement of the day was to be seen on the farm. During my stay with Mr. Fuller, I had a good opportunity of noticing many things, particularly in the treatment of animals, and to my great astonishment I found that most of them, Island and home bred, went out every day. In one paddock I noticed the heifers but all day on the snow eating hay and straw, with the thermometer to 15 degrees below zero, and looking as healthy and as well and much larger than any heifers I ever saw for there age."

FROM the *London Live-Stock Journal* we learn that the Hereford herd of Showle Court, now owned by Mr. H. W. Taylor, had been brought to a high state of perfection by his father, Mr. Wm. Taylor. The reputation of the herd is being well sustained by the present proprietor, who recently gained the champion prizes at the Hereford show at Monmouth, and the Chalmer plate against all breeds at the Dublin Royal Show in the spring. These results are credited in a degree to Mr. Taylor's having placed the bull Franklin 661st at the head of his herd, which was bred by the late Mr. Carwardine, of Stocktonbury, and sired by Lord Wilton 4700. The Showle Court herd was founded about the year 1814 by the grandfather of its present proprietor. The bulls first sired were not registered, as this very necessary work had not then commenced. The late Mr. Taylor, with his Herefords, won no fewer than 140 prizes during the last seven years of his life. He bred the famous Tredegar 5077, which won alone in prizes £379. The herd now numbers about 100 head, and most of the breeding cows are the get of such sires as 7 triumph 2nd, 3553, Mercury 3067, Tredegar 5077, Adamant 5710, the Royal winner Thoughtful 5063, and Taunton 5035. Amongst the heifers the V-nities rank very high.

A NEW order has been issued in Great Britain by the Privy Council relating to the importation of foreign animals, which, though very stringent is doubtless not more so than the exigencies of the case require. By this order the landing of cattle, sheep and swine is entirely prohibited from the Austro-Hungarian Empire, Dominions of the King of the Hellenes, Italy, Montenegro, Servia, Roumania, Russia, Turkey and France, and cattle are not to be admitted from either Belgium or Germany. Cattle, sheep and swine are freely admitted from Canada, Norway, and Ireland, and cattle and sheep from Denmark and Sweden. For the reception of foreign cattle which have to be slaughtered on arrival, "foreign animal wharves are provided at Barrow-in-Furness, Bristol, Cardiff, Falmouth, Glasgow, Grimsby, Hartlepool, Hull, Liverpool, London, Plymouth, Portsmouth, Southampton, South Shields, and Sunderland. Animals landed at these wharves must be slaughtered within ten days after landing." A quarantine station is provided at Southampton for foreign animals intended for reshipment to a foreign country, or for the purposes of exhibition or other exceptional purposes. Animals not subject to slaughter or quarantine are admitted only at the ports of Bristol, Glasgow, Grimsby, Hartlepool, Harwich, Hull, Kirkwall, Leith, Liverpool, London, Newcastle-upon-Tyne, Southampton, and Weymouth. When landed they are placed in charge of an Inspector of the Privy Council. After they have been detained 12 hours at the landing place this official shall carefully inspect them. If free from disease they "cease to be deemed foreign animals." If however any of them are found affected with foot-and-mouth disease, or cattle plague, all the animals at the landing place shall be immediately slaughtered. Most thorough measures for disinfection are also given in minute detail.

### Transfers of Thoroughbred Stock.

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

- CANADA SHORT-HORN HERD BOOK.
- Denfield Chief (13010) by Double Famosa Chief (6845), Donald Gillies, Nairn; Henry Boyd, Denfield.
  - Lucy Bell (14777), by Double Famosa Chief (6846), Donald Gillies, Nairn; Duncan Gillies, Nairn.
  - Duke of Oxford (13017), by Oxford Royal (13016), John Hickingbottom, St. Augustine; D. McIlwain, Nile.
  - Rob Roy (13018), by Fairview Chief (9965), R. D. Dundas, Springville; R. Bowles & P. Co., Springville.
  - Lady Cobern (14785), by 2nd Duke of Moundale (13022), E. W. & G. Charlton, Duncrie; John Cobern, Duncrie.
  - Greenholme Prince and (13024), by Christmas Duke (6747), John Rowntree, Thistleton; A. Hoover, Almira.
  - Sir Hilton (13023), by Baron Brawith (Imp.) (12739), J. W. Robinson, St. Marys; Henry Belton, Thorndale.

- b. Senator Plump [12488], by Young Clarendon and [10631], Geo. S. Inglis, Belmore; Peter Deans, Belmore.
- f. River Blanche [14601], by Duke of Bloomingdale [12188], Jacob S. Snider, Bloomingdale; Joseph Snider, Bloomingdale.
- b. Howick Prince [13032], by Duke of Bloomingdale [11988], Jacob S. Snider, Bloomingdale; Isaac W. Weber, Brotherton.
- b. Duke of Bridgeport [13031], by Duke of Bloomingdale [11988], Jacob S. Snider, Bloomingdale; Henry Erb, Bridgeport.
- f. Louise [14803], by Lorne [13563], Wm. Lackner, Hawksville; Geo. Lackner, Hawksville.
- f. Maple Grove Queen [14605], by Lord Morley [13033], Jos. H. Marshall, Masonville; John Rowell, Birr.
- f. Clara Belle [14804], by Lord Morley [13033], Jos. H. Marshall, Masonville; Wm. Walker, Ilderton.
- b. Lord Morley [13033], by Baron Constance, 37563, J. & R. Robson, Ilderton; Gibson & Winthrop, Ilderton.
- b. Knight of the Border [13035], by Comet [6761], Wm. Porter, Lloydtown; Charles E. Porter, Wyoming.
- b. Lord L. [13036], by Marquis of Lorne [11692], George Donald, Wyoming; John Muskell, Wyoming.
- b. Sir Robert [13037], by Baron Gano and [45781], A. Warnica, Craigvale; N. Jackson, Granger.
- b. Young Dixie [13039], by Lord Seaton [8595], Wm. Blanchard, Wingham; Mark Cassels, Wingham.
- f. Maple Queen [14811], by Earl of Aldric and [5159], A. Anderson, Newton; Wm. Wood, Tralee.
- b. Star of the West [13041], by Lord Monck [8875], Wm. Dewson, Victoria; Wm. Sawdon, Tilsonburg.
- b. Melbourne Duke [13041], by Baron Surmise [6620], Lord Alymer, Melbourne; Henry J. Gawne, Melbourne.
- b. Crown Prince of Benmiller [13047], by Duke of Maitland [7070], James Tabb, Benmiller; Wm. Hill, Benmiller.
- f. Regina [14814], by 2nd Crown Prince of Strathallan [13046], Richard Jackson, Londesboro; James Tabb, Benmiller.
- b. 2nd Crown Prince of Strathallan [13046], by Crown Prince of Athelstane and [2932], Jno. Miller, Brougham, R. Scott, Londesboro.
- b. Rob Roy [13048], by Garfield [6087], A. Aitchison, Inverhaugh; Frederick Rader, West Flamboro.
- b. Glancar [13049], by Admiral [8661], A. Aitchison, Inverhaugh; Usher Boyd, Sturton.
- f. Copp's Favorite [14816], by Young Doctor [9571], John Cullis, Fenelon Falls; John F. Copp, Fenelon Falls.
- b. Woodburn Prince [13052], by Senator [7836], Simeon Lemon, Kettleby; Wm. Sagsworth, Monck.
- b. Enchanter [13053], by Barmpton Hero [6595], J. & W. Watt, Salem; Francis Cassidy, Fergus.
- b. Rockwood Duke [13050], by Ed Hanlan [7046], Wm. McAlister, Stoney Mountain; Donald Fraser, Emerson, Man.
- b. Jolly Jack [13054], by Gambetta [13055], John S. McGilvery, Perth; C. M. Simpson, Almonte.
- b. Gambetta, [13055], by Prince Hillhurst 3d [13056], Dalton McCarthy, Barrie; C. A. Matheson, Perth.
- b. Prince Hillhurst 3d [13056], by Duke of Oxford 35th [19891], Hon. M. H. Cochrane, Compton, Que.; Dalton McCarthy, Barrie.
- b. Erie Chief [13061], by Brighton Duke [9719], Geo. Ba. Simcoe; H. M. Barrett, Port Rowan.
- f. Jessie [14818], by Earl of Kent [7033], Robt. A. Vancc, Mt. Forest; Wm. Caulfield, Mount Forest.
- f. Rose [7652], by Earl Goodness and [3122], Joseph Watson, Greenbank; D. V. Hicks, Dresden.
- f. Lily Languish [14215], by Baron Languish [4584], B. S. Seamon, Blenheim; Wm. Nichols, Blenheim.
- f. Lady Elgin [14821], by Blake [9699], B. S. Seamon, Blenheim; Wm. Nichols, Blenheim.
- b. Gay [13064], by Earl Minto [7020], Walter Quennell, Newbridge; Samuel Johnston, Fordwich.

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- Toms & Co.....Trusses.
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- Jas. Glennie.....Sale Shropshire Sheep.
- T. C. Patteson.....Shropshire Sheep.
- J. S. Williams.....Shorthorns and Berkshires.
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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.

Shorthorns.

Mr. Edward Jeffs, Bond Head, writes: "Since last report I have sold a young bull, Victor, by British Statesman—753—dam Zora 12th, to Mr. Timothy Doan, Newmarket, and the Heir, also by British Statesman—dam Imperial Diadem 2nd, to Mr. James Watson, Athlone."

We notice that the Champion prize bull of the Royal Show of England of a former year was beaten at the Oxfordshire show by Royal Ingram. Royal Ingram and the great Show bull Self-Esteem are both descended from the renowned Sir Arthur Ingram. They are of the Sowerby family, so largely represented in the recent importation of Mr. W. Linton, of Aurora.

Mr. Duncan McDougall of "Houghton Lodge," Marvelville, Co. Russell, is the owner of the good, strong, serviceable seven year old bull Protection, bred by F. J. D. Smith, Newtonbrook, Co. York. He was last purchased from the Township Society, Osgoode. Protection was sired by Royal Butterfly [2614], and is from the dam Grace Darling, by North Star [857].

At the Audley End sale of Shorthorns, held on June 26, there was spirited bidding. Thorndale Rose 24th, a beautiful red 4-year old cow, was purchased for the herd of Mr. H. Y. Attrill, of Goderich, Ont. Twelve Thorndale Rose females averaged £224 17s. 6d. and three bulls £143 10s. Thirty-two cows and heifers averaged £112 6s, and the 41 head sold averaged £107 18s 5d.

Mr. Daniel Barker, of Paris, has sold the following Shorthorns: To Mr. J. Idington, O. C. Stratford, two yearling Shorthorn heifers, Pansy and Beauty, Vol. III, B. A. H. B., and to Mr. J. Mills, Newport, one high bred Shorthorn grade heifer and the bull calf Earl Windsor, Vol. IV, B. A. H. B. Pansy is by Windsor—508—, and Beauty by Brigade Major—509—, Vol. III, B. A. H. B., and Earl Windsor by Windsor—508—.

The only pure Shorthorn bull that we saw during several days of travelling amongst the farmers of Dundas, Renfrew and Lanark counties, was the two year old Bull Duke of Roslea, bred by J. H. Ferguson, Brantford, and sold to Robert Whyte of Fakenham, for use by a number of the farmers in the neighborhood. This bull is from the dam, Jessie Morton and the sire Imp. British Baron—28—. He was bought from J. C. Snell, Edmonton, Ont., is a dark ruan in color and should make a good sire. There are no doubt a number of good bulls in those counties, but the reference that we have made will show how infrequent they are in a land pre-eminently adapted to the production of beef.

At the sale of the Bates Shorthorns the property of Mr. Edward Hale, of Tonbridge, North Frith, England, in July, three very choice animals were secured by Messrs. T. Nelson & Sons, Bow Park herd, and others for the herds of Mr. N. P. Clark, Minnesota, and Mr. J. J. Hill of the same State. The twelve Barringtons sold averaged £112 16s. 7d, all of which are descended from Mr. Sheldon's Princess of Barrington, purchased in 1879 at 160 guineas. The Kirklevingtons averaged £57. The following is a list of the animals secured for the Bow Park herd: Kirklevington Duchess 2nd, 50 guineas; Lady Resedale Barrington, 105 guineas; Lady Rosedale Barrington 2nd, 230 guineas; thirty-nine cows averaged £58 12s. and seventeen bulls £37 17 10.

Ayrshires.

Mr. Duncan McDonald, of Ormond, has in possession a fine Ayrshire bull, purchased from T. Guy & Son, Oshawa. He is used in the interests of the dairymen of South Osgoode, and when we saw him early in July was in fine trim.

Jerseys.

OAKLANDS JERSEY STOCK FARM NOTES.—Mr. Fuller's famous Mary Anne of St. Lambert has dropped a fine heifer calf by Ida's Stoke Pogis. If the new arrival ever become as famous as the mother, she is destined to a world-wide fame. We see it stated that Prince Pogis, the only son of Mary Anne of St. Lambert, has been sold to Hon. Henry L. Pierce, ex-Mayor of Boston. The price paid has not been made public, but we understand it runs into five figures. The Jersey cow, Rose of St. Lambert, with a record of 21 lbs 3 1/2 oz, has been sold to Mr. Wm. Shaw, of St. Johns, N. B., this month at \$2,500. She is pure St. Lambert blood Major Henry E. Alford, manager of the Houghton Experimental Farm, Mountainville, N. Y., had purchased Bachelor of St. Lambert, sire of Nell of St. L., who gave with first calf without forcing (for Messrs. Miller & Sibley, of Franklin, Pa.) before she was three years old, 10, 10 lbs of milk. Mr. Fuller reports his sales for the last six months as most satisfactory, notwithstanding the great depression in almost all lines of business. They aggregate for the six months over \$30,000, and most of the sales were heifer calves and young bulls under one year of age. The Messrs. Fuller also state that their venture in starting the "Oaklands Jersey Dairy" has met with much greater success than they could possibly have looked for, and that it is growing in magnitude very rapidly indeed. We hope to have some notes from Mr. V. E. Fuller on the management of their dairy at Oaklands, in our next issue.

Devons.

Mr. Adams' sale of Durham cattle near Woodstock, early last month, was not as well patronized as it should have been. Messrs. Donaldson, Macdonald, Patteson, and Murray of Chesterfield, represented the local Shorthorn breeders, and some good bargains were picked up. The heifers were by Baron Aylmer—2825—, he by Earl of Goodness 2nd a son of 4th Duke of Clarence, from Duchess 6th, of Dereham Abbey. Some of them, we hear, are likely to figure again in the ring, when Messrs. Cowan & Patteson have their great combination sale next October, at Galt.

Horses.

The favorite Clydesdale at the Edinburgh show was a 2-year-old, named Prince of Dee, sired by Prince of Wales 673, and from the dam Darling 3559, by Carrick Lad 1087. He is owned by Mr. Wm. Montgomery and is looked upon by a number as the coming Clydesdale horse.

Sheep and Pigs.

Messrs. Grant & Campbell, of Woodville, have dissolved partnership. owing to the increase of their stocks and herds they have thought it better to separate. Both will continue breeding pure bred stock, and both will exhibit at the shows this fall. Thus the good work extends.

Mr. John Jackson, Woodside, writes: "Southdowns have done unusually well, the weather having been cool so far, with a good growth of grass. Have the best lot of lambs we have ever had. They are mostly the get of our gold medal ram Beau Brummel. The Shorthorns and Berkshires are also looking well. Have made the following sales during the month of July: One Berkshire bear pig to Ishmael Bartlett, Fulton; two imported three shear ewes, one shearing ewe and a shearing ram to Mr. U. Privett, Greensburg, Ind. Mr. P. intends exhibiting them at Indianapolis, St. Louis, and other leading shows."

Advertising Rates.

The rate for single insertion is 18c. per line, Nonpareil (12 lines make one inch); for three insertions, 15c. per line each insertion; for six insertions, 13c. per line each insertion; for one year, 10c. per line each insertion. Cards in Breeders' Directory, not more than five lines, \$1 per line per annum.

Copy for advertisement should reach us before the 25th of each month (earlier if possible). If later, it may be in time for insertion, but often too late for proper classification. Advertisers not known at office will remit cash in advance. Further information will be given if desired.

STOCK FOR SALE.

**BERKSHIRES,** A lot of spring pigs, bred straight from the best imported stock.  
Jy-21 H. SORBY, GOUROCK, ONT.

**FOR SALE!**  
The 1-year Ayrshire Bull General Gordon  
Color, white and dark red. Dam, Nelly Mars [1541]; G. D., Julia Mars [1394]. Sire, the famous imported bull Stoncalsey [1435]. This fine specimen of the breed will be sold very reasonably. Apply to  
Jy-21 **E. WARE, Hamilton, 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.



# OAKLANDS KOUMISS

An Effervescing Drink, manufactured out of

## Pure Jersey Milk

Without the use of any acid whatever, by the

### OAKLANDS JERSEY DAIRY.

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

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

**DYSPEPSIA,  
INDIGESTION AND  
CONSUMPTION.**

IT IS INVALUABLE TO CONVALESCENTS.

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

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

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

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

	Number Treated.	Number Cured.
Chronic Pulmonary Catarrh,	520	352
Chronic Pneumonia,	204	50
Tuberculosis,	64	11
Anaemia,	122	65
Pleurisy,	33	17
Chronic Gastric Catarrh,	33	32

Total number of cases treated, 983; of these 551 were cured. 314 improved; in 123 cases there was no change or falling off or death. 858 of these patients suffered from affection of the lungs or respiratory tracts. In 660 cases the correct weight was taken, and the average gain at the end of the cure was 8 1/2 lbs. each. But few drank of the Koumiss for more than six weeks.

For sale in HAMILTON,

WM. SOMERVILLE & CO.,

No. 8 Hughson Street North.

Outside of Hamilton,

OAKLANDS JERSEY DAIRY,

Aug-6t

HAMILTON.

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 Hochelaga County Exhibition for 1884. For particulars apply to

JAMES DRUMMOND,

my-y

Petite Côte, Montreal.

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

Jy-2t

H. SORBY, GOUROCK, ONT.

## The Ontario Experimental Farm PUBLIC SALE

OF LIVE STOCK,

Friday, 4th Sept., 1885.

A large number and variety of cattle and sheep from the new importations, consisting principally of two bulls and three Shorthorn heifers; two bulls and two Hereford heifers; five bulls and three Aberdeen-Poll heifers; two bulls and one Holstein heifer; two bulls and three Ayrshire heifers, one bull and two Jersey heifers; and three Guernsey heifers; along with five fat exhibition steers of Shorthorn, Hereford and Aberdeen-Poll crosses, averaging 2,000 lbs., a number of Cotswold, Leicester, Highland, Cheviot, Oxford, Shrops., Hamp. and South-down rams and ewes; twelve fat shearing wethers, averaging 210 lbs.; and Berks. and Essex pigs.

NO RESERVE WHATEVER AND EASY TERMS

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

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

SEND FOR CATALOGUE.

GUELPH, ONTARIO.

WM. BROWN, Aug-2t

## AUCTION SALE —OF— Shropshire Sheep

The subscriber will sell by auction at the stables of the Commercial Hotel,

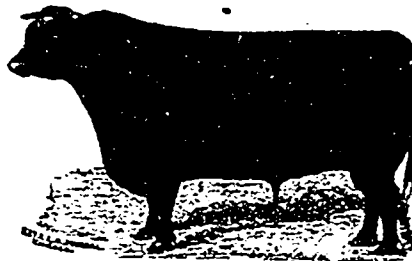
IN THE CITY OF GUELPH

On Friday, September 4th, 1885,

immediately after the close of the sale at Agricultural College. 60 pure-bred Shropshire sheep—a number of them imported—consisting of two and three shear ewes, shearing and two shear rams, ram and ewe lambs. Send for catalogue.

JAS. TAYLOR, ESQ., Auctioneer. JAS. GLENNIE, Gourock P. O. Aug-2t

## RUGBY FARM.



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

—BREEDER OF—

Shorthorn Cattle and Berkshire Hogs.

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

My Berkshires are of the choicest breeding—large size and grand individuals. For prices and other information, address as above. Aug-3

## RUPTURE

EASE, SECURITY AND DURABILITY

The "TRUSS" Truss conveys a Natural Inward and Upward Pressure, giving Permanent Relief without galling or chafing—never shifts, most perfect retainer. Thousands are worn in Canada, and endorsed by our best surgeons. If you want Comfort and Safety try it. (Sent by mail) Illustrated Pamphlet free. Address, TOMS & CO., DRUGGISTS,

274 Yonge St., TORONTO.

## Guelph Central Exhibition

Will be held in the Exhibition Grounds, in the

CITY OF GUELPH,

[On Monday, Tuesday and Wednesday, SEPTEMBER 28, 29 and 30, 1885.

Prizes will be given for Stock, Produce, Ladies' Work, Fine Arts, Lady Riders and Drivers, Speeding in the Horse Ring, Collie Dogs

For further particulars see prize lists, which can be had on application to the Secretary.

JAS. MILLAR, Aug-2t President S. W. A. S.

R. MacKENZIE, Secretary.

## GRAND DOMINION AND 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 Boots 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 24th.

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

HENRY WADE, Secretary Agriculture and Arts Association, Toronto.

GEO. MOORE, President, Waterloo.

Jun-4t

## 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 Ladies' Work, etc., etc.

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

An immense programme of

SPECIAL ATTRACTIONS

is being prepared for this Exhibition.

CHEAP FARES and EXCURSIONS ON ALL RAILWAYS. Copies of Prize List and Entry Forms sent to any one on application, by post card or otherwise, to the secretary at Toronto.

Entries Close Saturday, August 22nd.

JNO. J. WITTHROW, President.

H. J. HILL, Manager and Secretary, TORONTO.

Jun-3t

# THE ONTARIO AGRICULTURAL COLLEGE

—WILL—  
**RE-OPEN ON THE 1st OCTOBER.**

Examinations for admission on the 2nd October.

For circular, giving full information as to terms of admission, cost, course of study, staff, etc., apply to

JAMES MILLS, M. A., President.  
GUELPH, July 10, 1885. Aug-21

## Shorthorns and Shropshire Sheep

Bred and Imported by

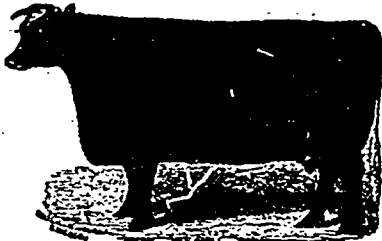


**JOHN DRYDEN, M. P. P.,**  
BROOKLIN, ONT.

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

**LORD GLAMIS (48192).**

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



Importers and Breeders of

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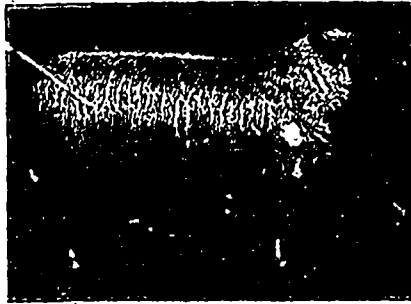
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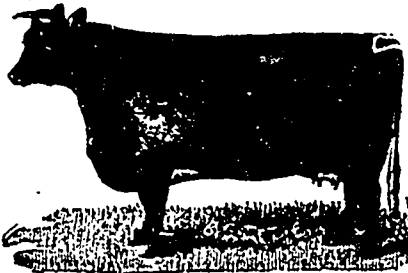
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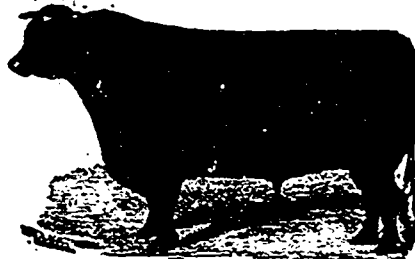
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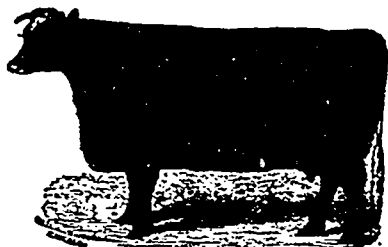


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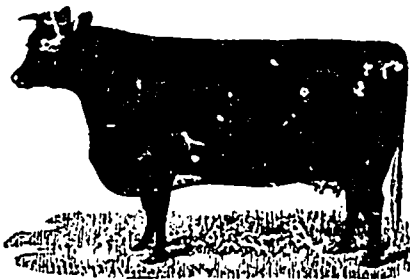
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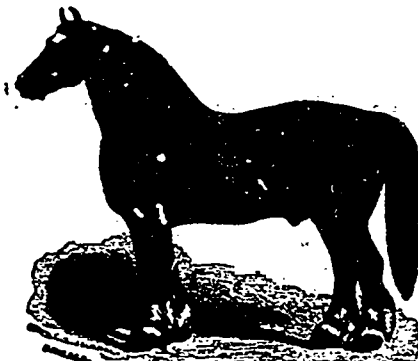
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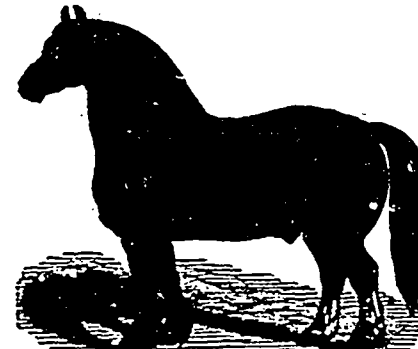
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has for sale, at very low prices, six young registered imported Clydesdale Stallions and a number of imported Clydesdale mares, also imported and home-bred Shorthorn bulls and heifers. Stations—Clarendon, on the C. P. R., and Pickering, on the G. T.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

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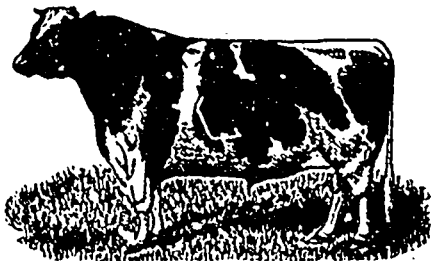
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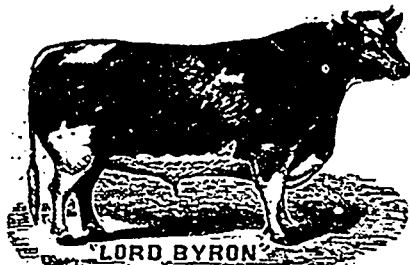
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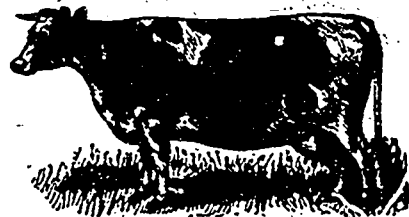
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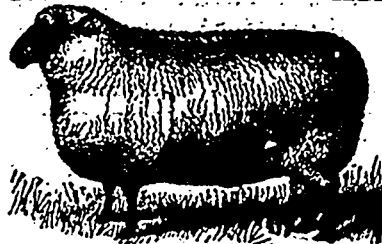
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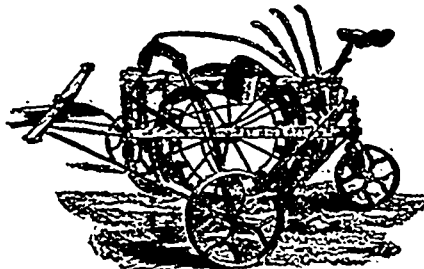
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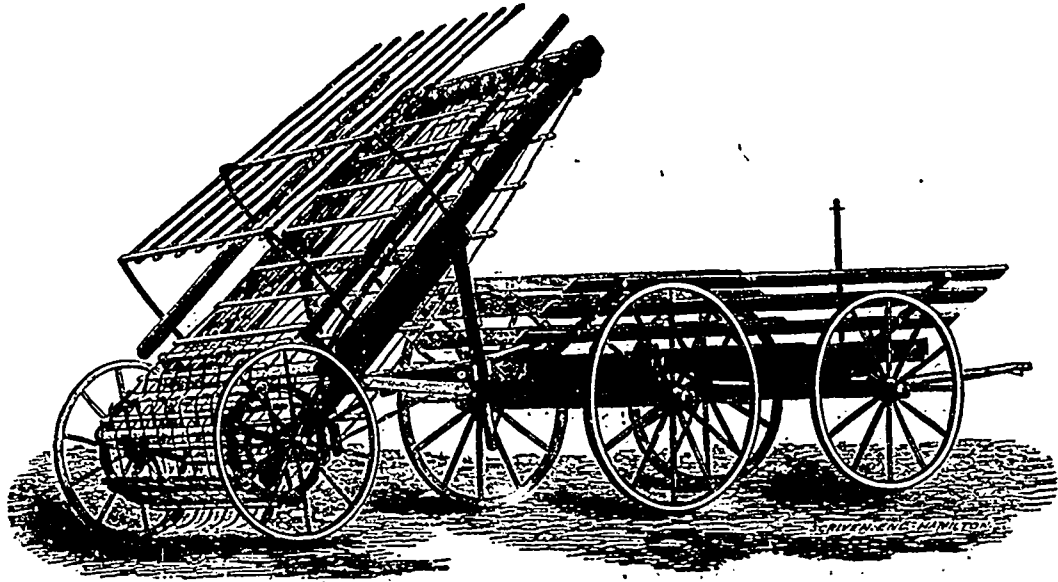
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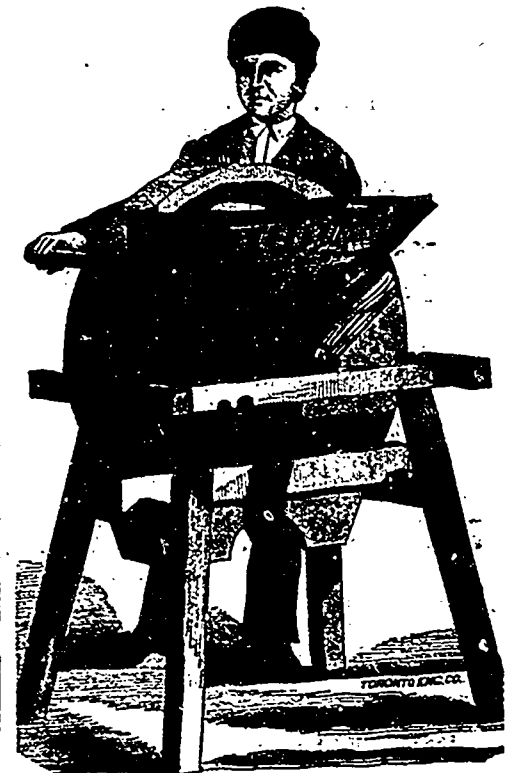
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