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# LIVE STOCK & FARM JOURNAL



Devoted Mainly to the Interests  
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But Overlooking no Department  
Of the Farm.



PUBLISHED BY THE J. E. BRYANT COMPANY (LIMITED), TORONTO, CANADA.

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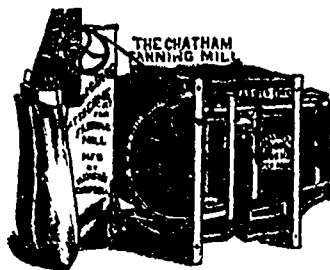
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GENTLEMEN.—Used your Grape Food Fertilizer on peaches and pears, receiving a very abundant yield, the largest crop I ever had, and am pleased to place my order for over one ton more for the coming season's use.  
Niagara, Jan. 28th, 1890. (Signed) J. NIVEN.

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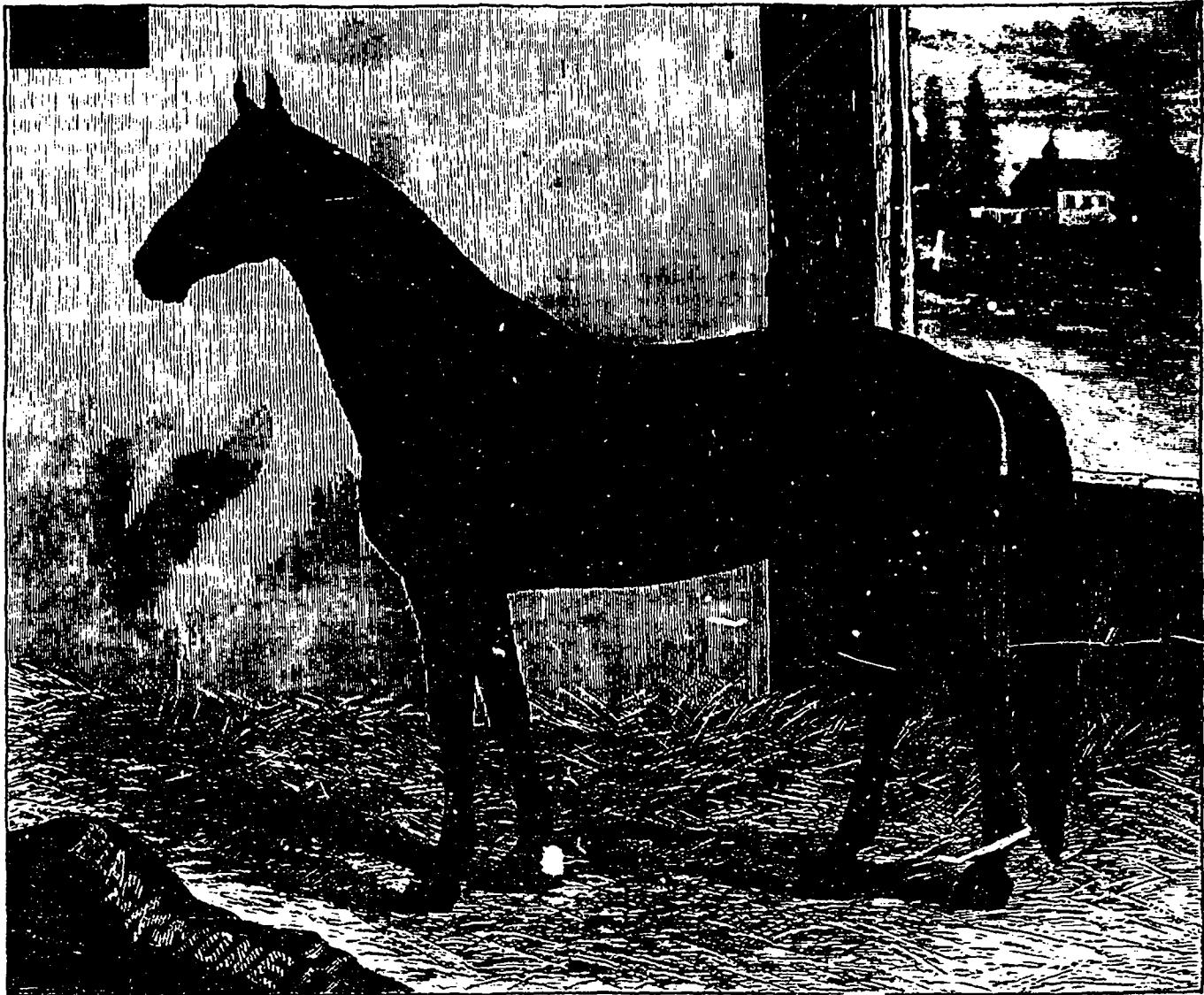
# THE CANADIAN LIVE STOCK AND FARM JOURNAL

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

VOL. VII. No. 5.]

TORONTO, MAY, 1890.

[WHOLE No. 79



NOTED GELDING PRIZE-WINNER, "BLACKSTONE."

Owned by Mr. St. John, Toronto, Ontario.

## Our Illustration.

The subject of our sketch this month is a handsome gelding owned by Mr. St. John, of this city. This horse, in general conformation, is one of the highest type of what a good horse should be, and those of our readers seeking an ideal cannot do better than indelibly stamp on their memory the beautiful, yet true, sketch, that our artist has made. Blackstone is a fine, up-standing horse, stylish in general appearance when standing, but when in action beauty radiates from every feature. He is a horse that would at once catch the eye of the most careless observer, and, though at first appearance he may not make a thoroughly satisfactory impression, he never fails to do so when carefully examined, and his conformation noted and qualities weighed in the balance. He is a beauti-

ful black in color, with small star on forehead. His countenance is frank, and every lineament of his features is distinct. A beautiful junction takes place between the clearly chiselled head and well proportioned neck, which carries his head so gaily. The depth of chest is a striking feature that at once attracts notice, and may in part account for the squareness and rapidity of his fore action. His body is strong below, and strongly coupled and firmly ribbed. A loin swathed in muscle, and a slightly drooping rump, gives him that sweeping stride behind that counts for so much in a roadster horse. He has the best of limbs, clean and fine, with tendons prominent and large. This gelding was sired by the well-known Blücher, a thoroughbred that achieved the high honor of winning first as a two-year-old at the Centennial at Philadelphia. He was exported to Australia and

is now in Scotland. Blackstone's dam was by Black Hawk Morgan. Blackstone has won many laurels in showings where competition was not wanting. He and Mayflower (now owned by Dr. Morgan, of Peterboro'), won the team race at the Toronto Industrial, '88, and again he and Tennyson won the team race for horses 16 hands and over, at Toronto Industrial in '89. At the Industrial last year he won first prize as gentleman's road horse, doing the mile on a heavy track, before a 250 lb wagon, in 2.44. In conclusion we would say that the gauging of the worth of this horse cannot be done by proxy, but must be done by a personal view of him as he splits the wind before his genial owner, Mr. St. John, on Dufferin Park drive.

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**Canadian Live Stock and Farm Journal**  
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TORONTO, MAY, 1890.

### Original Plans, Devices, and Ideas.

If you have an original plan, device, or idea, that you think would be of benefit to your fellow farmers or stockmen, turn to our March number and see how we will pay you for it if you send it to us for publication. Space forbids us printing the whole scheme in full, as usual. We would refer those desiring to know more of this to our January, February, and March numbers, where the premiums are given in full with complete particulars.

### Our Hog Competition.

With a fervent desire to have our farmers clearly realize that the most profitable line of work for them to follow is that of live stock husbandry, we have decided to devote our best energies and spare no expense to lay bare this fact so strikingly that no one, be he ever so deep in the ruts of custom, can fail to grasp the truth. We have convinced ourselves that through the swine industry we may best demonstrate this, because there is less difficulty in digging up the scheme of competition with justice to all, and also because we may better carry it out. We would like our stockmen to feel that this is not undertaken specially to boom the swine industry, but mainly to prove indisputably to our farmers that stock-raising and its attributes will yield more profit than grain-growing. We view the matter in this light. Through showing the farmer the profits in swine raising, and inducing him to undertake such work, which he will readily do if shown beyond dispute that it is profitable, as there is little capital needed in starting, we may reasonably hope that the light will gradually dawn upon him with the result that he will aspire higher, and enter other branches of the live stock industry. For this reason we trust that every one interested in live stock matters will lend a hand, so that we may incontestably prove to the farmer that it is to his interest to follow such lines of work.

Following out this idea, we shall offer a series of prizes to the value of \$72.50, divided as follows: value of first prize, \$25.00; value of second, \$20.00; value of third, \$15.00; and \$12.50 as the value of the fourth. These prizes are for the best marketable hog, and it should be remembered that they are additional to the market prices of the hogs entered, as Messrs. Davies & Co., of Toronto, have generously and liberally consented to pay the highest market price at the time for all that are entered.

In making the awards the judges will give most prominence to (1) form and quality of the hog, keeping in view the market demands, and also to (2) the cost of production as determined by the food fed, and other items of expense, as well as the age of the pig or time of production. In regard to the first, the ideal hog will be small in the head, light in the jaw, long in the body, broad across the loins, full and deep in the hams, and light in the bone. The mixture of the fat and lean, as well as the nature of these, will be considered important. In respect to the second, as one of the chief features of this competition is to determine the profit, we must have clear certified statements as to the age, foods fed, and full details as to the cost of production, while the various items of management followed by the winners will be of interest merely for publication.

We have printed forms now ready to send out to all intending competitors, and we would ask all thinking of entering

to send in their names at once. In the meantime all that is necessary is to note the date of birth, and the various items of expense, so that the forms may be readily filled out. We may say that the prizes will be further supplemented by others, given by public-spirited men. We shall, as soon as possible, give the limits of time between which the hogs should be shipped to Messrs. Davies & Co. Remember this costs you nothing, and that you stand a chance of winning a handsome prize, besides obtaining the highest market price at the time for your hogs. We would earnestly ask all to give us their heartiest co-operation in this matter, for the value of the results to the live stock fraternity and our farmers will depend greatly on the warmth of the interest evinced by all. If further details are desired, a postal card addressed to us will be readily answered. The forms will be sent to all applicants.

### A Word to Horse Breeders.

The season is near approaching when the horseman will have his judgment actively called into play on the choosing of stallions. Let it be remembered that one of the most effectual barriers that impedes the expansion and profitableness of our horse-raising industry is due to errors of judgment in choosing sires. In the first place, it is best beyond dispute to have nothing to do with a stallion that is not pure-bred. For draught purposes, judging between two pure-bred stallions, we would give most prominence to bone, muscle, and pedigree, in the order given. A stallion of strong frame and firm bone has the best foundation for muscular development, and having these, he will as a rule have weight. The latter is a prime feature in any draught horse, but it should be weight due to bone and muscle, and not to over-feeding with soft food and drugs. A few are inclined to overlook the fact that there are scrub pure-bred stallions as well as those of inferior breeding. There are inferior Clydesdales, Shires, and Percherons, both in breeding and individual merit, so that it becomes of importance to discriminate closely between members of the same breed. A light stallion, one suitable for crossing to produce carriage horses, should, generally speaking, be not only possessed of bone and muscle, but these should be of the highest quality. A stallion that is under sixteen hands, unless crossed on very rangy mares, will not throw stylish carriage horses for which the highest prices are paid. An active disposition is also of the first importance, and this should show itself in a clean quick stride and a gay carriage. A serious impediment that has kept down the quality of our horses, both driving and draught, has been due to the aversion of many breeders to pay a few dollars extra for the service of a superior stallion. Supposing you patronize a "plug" stallion because his fee is only five dollars, in preference to a pure-bred one of better merit in every way because the fee in this case is twenty dollars. It will cost as much to rear either, and we feel sure that if the pure-bred sire has been at all worthy of his service fee, his colt will sell for at least fifty dollars more than the other, when they become four year olds. That means that this difference of fifteen dollars in the first place has grown to be a difference of fifty dollars in four years, or in other words, that the invested fifteen dollars has yielded a yearly interest of over fifty per cent.

### Use Gypsum.

It has been clearly shown by Prof. Roberts, of Cornell, that the liquid manure produced from a herd of cows has a fertilizing value of forty-four dollars for every hundred dollars' worth of food that they consume. We will venture the assertion that on the majority of farms fully one-half of the liquid manure finds its way through the stable floor or dribbles into the creek. With straw liberally used the greater part

may be saved, but even under the best of management, with straw a considerable portion is lost. Through the use of gypsum, or land plaster, in conjunction with straw, a complete saving may be made, and the value of the manure further added to by the fertilizing value of the gypsum itself. The best white gypsum can be bought for three dollars per ton at the place of shipment, and as it only takes at the outside one pound per day for each animal to save the liquids and keep the atmosphere of the stable sweet and pure, the cost per day comes to the small sum of one-sixth of a cent. By a number joining together and buying in car lots it would come much cheaper to them than if only small quantities were taken at one time. It is to be remembered that gypsum as a fertilizer alone is worth the cost price to the majority of farmers, while for purifying the atmosphere of the stable and saving the loss of gases and liquids of great fertilizing value it cannot be equalled.

### False Registration.

The worth of any stud, herd, or flock book depends almost solely upon the reliability of the registrations that have been made therein, and these again rest upon the integrity and carefulness of the breeder in transmitting facts and the exactness of the compilers, and their ability to ferret out and exclude those entries of a suspicious nature that are offered. In most cases, to the honor of those using the registration records be it said, wrong entries are due to carelessness, but it is a fact nevertheless that the conscience of some mortals is so little in comparison with their avarice that the former may be easily swallowed up by the latter, and the excuse "a slip of the pen" used as a balm to salve the wound in the minds of the honorable public. It may be of interest to some of our readers, and of benefit we trust to very few, to know that it is a serious matter to knowingly make a false registration, and further, that upon the culprit the law lays no gentle hand. To our mind it really amounts to obtaining money under false pretences, for pedigree possesses a money value, and false registrations, knowingly made, are submitted with the hope of either securing more patronage or selling the stock for increased prices. We notice that the officials of the Dominion Draught Horse Breeders' Society have lately been carrying on a suit against certain parties who had furnished false data. The plea set up by the defendants was that the false entry was purely a mistake, but it is a curious fact that the pedigree was made considerably more valuable because of the substitution. A couple of other cases of a similar nature were also up before the court, but owing to the objection raised that the informations were not laid within three months of the committing of the offence the cases were dismissed. 'Tis bad enough to have "legal fiction" buffet hard facts through juggling lawyers, yet it is worse for dishonest-minded persons to know that through such quibbles as these they may defy the spirit of the law and yet often obey its mandates to the letter. Little fish, however, can swim in any bucket, and it takes a fine net to catch them. The action instituted by the officials of the above association will prove an effective reminder to those knowingly lax in their entries to be more exacting in the future. A case of somewhat the same nature was up before a Glasgow judge a short while ago. A stallioner represented his horse to a breeder as being a pure-bred Clydesdale, but after the latter had patronized him he learnt that he was not a pure-bred, and on this account refused to pay for the stallion's services, though the mares were in foal. The outcome of the suit was that the judge gave decision in favor of the defendant.

### The British Market for Mutton.

At present the outlook for the sheep industry is brighter in many ways than it has been for some time. The fact has become known to many of our farmers that, all things considered, the sheep of the farm will compare favorably with any of the other domesticated servants in respect to the productiveness of their work, and reliability in making payments. Our American friends in such cities as Buffalo and New York have smacked their lips in an appreciative manner over the luscious chops that reached them from Canadian pastures, but the political practitioners have placed on record their disapproval of this, so that it is altogether likely our mutton must seek a market elsewhere. It is gratifying in this connection to read the report of the Canadian Government agent at Liverpool. Mr. J. Dykes writes that, notwithstanding the large importations of frozen mutton from Australia and the River Platte, the price of live sheep has been fully maintained and the primest Down sheep readily realized 20 cents per pound; and further, that the prospects for British and Canadian sheep raisers are better for 1890 than they have been any time within the past ten years. Mr. Dykes is of the opinion that with care and attention, and the introduction of Down sheep into the Dominion, breeders there will find a profitable market for all the sheep which can be exported to Great Britain, despite the increase in the frozen mutton trade, and to warrant this assertion he refers to the present state of the market. He notes a novelty in the Canadian export trade last year, namely, the arrival of a consignment of Canadian lambs. It is stated that these were by no means of exceptional quality, but they arrived in splendid condition, and the mortality was very small. They were eagerly bought up by graziers, and the intention is to keep them as stores until next year. The venture is said to have been so profitable that arrangements are being made to extend the business considerably. "If," says Mr. Dykes, "by the introduction of early maturing sheep, Canadian farmers could produce a lamb 60 lbs. weight, to ship to this country in October, I am confident they would find the British markets far more profitable than those of the United States, which have been hitherto relied upon, and the result would be a great development of the export sheep trade." A breeder in England has just published a report of his lambs, which shows that his wether lambs, fed in the ordinary way in the fields, sold for between \$11 and \$12 each, at from six to nine months old, probably the average did not exceed seven months. There is nothing to prevent Canadian farmers with care and attention, obtaining equally satisfactory results."

### The Prejudice Against Barley as a Stock Food.

Prejudice, favorable or unfavorable, is one of the most malignant types of imperfect knowledge, as there is no other form that will so effectually impede the upward progress of man. It may be safely stated that the intelligent man is most easily separated from his opposite, by the degree to which he is open to conviction and free from the multiple prejudices that enshroud the human mind. Careful though he may be, yet the most liberal minded man is apt to allow his opinions to develop into prejudices, so that it becomes us to often inquire into our opinions, weigh the arguments for and against with justice, and reconstruct the conclusions if necessary. In this direction, we would ask those that have no faith in barley as a stock food, to carefully consider the grounds they

have for such an opinion. We believe that this grain is lingering under a prejudice, and the difficulty is, that it is an impossibility to locate it. The principal reason why many have not fed it, has been due to the fact that it has always brought a good price in the market. As the price is now low, and as there is not much prospect of an advance, many will be in a quandary as to the extent to which they ought to sow it this season, and hence, a few facts to show the value of this crop outside of that given it by the market, may not be amiss at the present time.

In nutritive value, barley and oats are very nearly alike, with the exception of the fact that the latter contains considerable less husk or fibre than the former, and on this account oats have been specially valuable as a single grain for horses. It must be admitted that barley unground and fed alone with hay, is a poor feed for horses, but ground with other grains, or boiled, it is of great value for this purpose. A mess of boiled barley every Saturday night is excellent to keep the system of working horses in healthy condition, and used in this way it is equally as beneficial as a bran mash. Many horsemen believe that only oats alone should be fed horses, overlooking the fact that the latter, as well as the other animals of the farm, are fond of a variety, and on this account, a mixture of chopped food, barley and oats in equal proportions, will often be surprisingly beneficial. It is the custom in Europe, as well as in the Western States, to feed barley extensively to horses, and in the latter, it is cut early and made into hay in considerable quantities to be fed. For cows, barley has been found to give excellent results as a food, ground, and with other grains as a part of the ration. It is, however, specially valuable for feeding calves that are on skim milk, in conjunction with chopped oats. They like the mixture and do well on it. Barley has long been tried as a food for pigs and for finishing them off for market few foods are so valuable. It is not as fattening as corn, but is ahead of most other grains in that respect. It only remains, in conclusion, to mention the high position that barley has always held in the estimation of the poultry fancier and alluded to its value as a green fodder when cut early. It may be sown late for the latter purpose as it is not easily damaged by the first frosts. We bespeak for this grain a trial, for we are convinced that it now labors under a prejudice which it would be to the interest of all to remove.

### Washing Sheep.

Sheep-washing is of less importance now than in former years, because it is less universally practiced. However, a majority of the farmers of Ontario still wash their sheep, hence the modes of doing it is a matter of no little importance. The common practice is to drive the flocks to a brook where the water is sufficiently deep to cause the sheep to swim while in the act of being washed. An enclosure is built on one side, and after the operation the animal is allowed to emerge from the water on the farther shore. This plan answers very well where the water is deep, and the bottom of the stream does not consist of soft mud or clay.

Other methods, however, are preferable to this where the facilities are at hand. One of these is to throw a dam across a small stream with a board shute in the centre of the dam, and almost as high as the same, through which the water will run, and underneath the fall from which the sheep may be washed. The expense of this would be too great unless there

exists some further reason for the retention of the dam. Sometimes streams of more magnitude are at hand where permanent dams are already constructed with an even flow of water over the top for a considerable portion of their length.

Here an enclosure may be constructed on one shore, where the sheep are driven. A floor of board not closely laid leads from this to the farther shore, along which the sheep are led to be washed. This floor may be protected on the lower side, or on both sides, by a low fence. One man hands the sheep through the lifting gate to the washers. With their rubber suits on they can work for a long time without discomfort. This plan is an excellent one in a neighborhood where the number of flocks is large. The farmers can club together, and share the expense of building the enclosures required.

In washing, the wool is pressed together by the two hands grasping all that they will hold, and pushing them toward each other, while at the same time each squeezes the wool tightly within its grasp. This should be continued until there is no more discoloration of the water when the wool is so squeezed. Beyond this any further labor expended is lost.

Tagging before washing is very important. This consists in removing all the portions of the wool, with an old pair of shears, that may be bound together by clots of dung. These tags if very foul are worthless, but sometimes it may be worth while to soak them and wash them for sale. Tagging had better be done at home, but may also be performed just before washing if necessary.

Another mode of washing, where streams are not at hand, is to construct a box of sufficient depth into which the sheep are led, but in this case the water requires to be changed frequently. There will be no difficulty in doing this where a tank is at hand supplied with a hose, but otherwise it may prove a laborious operation. It has this advantage, however: the water may be warmed to the desired temperature; which avoids the danger to the health incurred by standing long in a stream engaged in sheep-washing, when the temperature of the water is anything but agreeable. Rheumatism and kindred ailments is often the fearful price paid for the "fun" of sheep-washing in a brook.

Latterly the tendency is to shear the sheep without washing at all, and where the sheep are at all kept as they should be, there are many things to recommend the practice. The fleece may be removed much earlier, which is a great advantage to the sheep. It is simple and easy to leave the wool upon the sheep, on into the summer heat of the month of June, as is so frequently done. It also enables the work of shearing to be put past at a season of the year when labor is cheaper, and other farm duties are less pressing.

The great obstacle in the way of the more general adoption of the practice by farmers is the difficulty met in the disposing of unwashed wool. There is no definite understanding as yet between buyer and seller as to the amount that should be deducted for shrinkage because of the dirt which the wool may contain. Some buyers deduct *one-third*, and some *one-half*. The latter amount is manifestly too much, unless in a very few instances where the management of the sheep has been neglected.

It is apparent, however, that no fixed rule can be adopted in reference to this, although a general one could be. The difference in the amount of dirt in fleeces of different flocks would stand in the way. Much, therefore, must remain with the judgment of the buyer, and, after all that can be done, individual sales will have to be matters of adjustment between buyer and seller.

The relative shrinkage of washed as compared with unwashed wool is not the easiest thing to determine, owing to the difficulty of ascertaining the weight of a fleece exactly before it is shorn. The difference between the weight of an unwashed fleece when first shorn, and of the same fleece washed after shearing, does not represent the exact amount of shrinkage in a fleece shorn before washing, and the same fleece, if that were possible, shorn after washing. The amount of yolk which comes back into the wool in the second case is to be considered, and this is a somewhat undeterminable factor.

Before concluding this paper we would like to call the attention of our readers to the wisdom and humanity of handling in the most gentle way the poor dumb creatures so easily injured while undergoing what must prove to them the most unpleasant ordeal of washing. Because of rough treatment in handling, and of overheating on the way to the place of washing, valuable animals are oftentimes lost.

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### Keep the best Brood Mares in Canada.

The fable of killing the goose that lays the golden egg is as old as Esop, but the acts which it condemns are as young as yesterday. We find examples in the selling of the best of our brood mares to American buyers, which had better be kept at home as breeders. This process has gone to such a length that it is assuming an aspect of seriousness, especially in the line of heavy draughts. It might be taking strong ground to say that the farmer should never sell the best of his stud, for the price offered might be such that it would involve much risk to refuse it, but generally speaking the best should not be sold.

The stringency of the times may account in part for this course complained of. That the Americans to whom we usually sell want animals of the first order is a further explanation, but that either of these reasons should justify a continuance of the practice is false logic. If we yield to the temptation to sell such mares there can be but one result, and it is this, that after a time we must cease to have good mares to sell, and so will lose a market which we are most anxious to retain.

The old country breeders set us a good example in this respect. In the breeding studs there, a number of mares are set aside which are virtually labelled "hands off," and if one sets upon them an eye that is ever so covetous, it is of no avail, for ordinarily they refuse to sell. They know full well that unless the individuals of the stud generally come up to a certain standard of excellence, the trans-atlantic trade must cease.

It is certainly very much to our interest that we are favored with the American trade in heavy horses, both for purposes of breeding and labor, and it needs no line of elaborate arguing to show that it is to our interest to retain this trade. If the tariff wall is raised higher we are not without good hope of climbing over it, providing we can produce better horses than are usually produced in the United States. Our chief hope of doing this lies in breeding from the best in our own studs, and by raising sires of the most approved excellence individually.

The practice we are condemning is most discouraging to those enterprising men who introduced good stallions into neighborhoods for the improvement of the standard of the horses in these respectively. They are not encouraged as they should be, for farmers whose mares are only medium, or interior, cannot afford to pay a service fee equal to those whose mares are of approved excellence. Nor is it reasonable to

expect that the progress in such instances will be of a very high order, for though the excellence of the male has very much to do with the production of good horses, it is important at the same time that the female be good also, or the progeny will not be so good as it should be.

The extent to which this trade might be developed is really without limit. The cities across our border, in all the newer states, are growing with an amazing rapidity, and with their growth the demand for heavy horses keeps pace. The demand in our own Dominion is very considerable, and is likely to be more. With due attention to breeding and selection, the acknowledged superiority of our horses may easily be retained in the several Provinces of the Dominion. In such a case the market is sure for a long time to come, for a tax of ten dollars of a tariff, or even a much larger sum, would not prove an insuperable barrier in the sale of horses of undoubted excellence, when these are wanted in the great republic which finds so much use for a large proportion of what we raise. "Aim high" is a motto which becomes alike the peasant and the king. It is specially applicable to the breeders of good stock, for their mistakes are so very difficult to rectify.

The line of argument adopted in this article is equally applicable to the breeding of all kinds of live stock. The best must be retained with every successful breeder, so long as the rule holds good that "like begets like," or the change will be downward rather than upward, and this would be disastrous to the live stock interests, which are by far the most important in this Dominion at the present time.

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### To be Well Shaken Before Taking.

We have been favored with a circular issued for the purpose of securing the opinions of those interested in our cattle export trade, as to the advisability of establishing a port at some such place as Longue Point, for instance, for the shipment of American cattle to the British market. We have already plainly expressed our views of this scheme, and as the conclusions given then were the result of careful and thorough consideration, we do not abate one jot or tittle from our first position. The drafters of this circular rightly express their confidence in the good sense of the British authorities, but we are forced to differ from them in the assumption that this same good sense will prevent them from scheduling Canadian cattle, were our authorities so rash, and lax as to permit of American cattle being shipped from a Canadian port. Sir Charles Tupper, in his report as High Commissioner says: "Cattle diseases, and more especially pleuro-pneumonia, have been very troublesome during the past year. It will not have escaped your notice that several cargoes of animals affected with this scourge have been imported into British ports from the United States. There is no doubt the cargoes from Canada are being carefully watched, and I cannot too strongly urge the necessity for every precaution being taken to prevent the importation of the disease from the United States into the Dominion. The arrival of a single cargo from Canada would have serious results upon the live stock trade." During the last season there has not been a single case of cattle disease in animals imported into the British markets from the Dominion, while almost weekly the Canadian agent at Liverpool reports cattle from the United States slaughtered at that and other ports, are found infected with it. It is further stated in this circular, that the British farmers have petitioned the home government to allow American

cattle to be taken into the interior, and be fattened and finished as our Canadian cattle are. Such a sweeping assertion is not justified by the facts. As Sir Jacob Wilson at a recent council meeting of the Royal Agricultural Society expressed it, the demand for stores is to a great extent local, and as that gentleman states of this measure, "it is on this side of the water mainly advocated by the gentlemen, who, however great their stake may be in this country, have considerable interests in the United States, which very naturally cause them to be anxious, if possible, to open up an export trade from that country to this." At the same meeting a resolution was carried unanimously, emphatically protesting against any present relaxation of existing regulations. The epistle we have to hand reasons thus: "Some 12,000 head of American cattle have passed in bond over 600 miles of Canadian railway since November last, on the journey to the port of Portland. They were all unloaded, fed, and watered in Canada. They were not and are not subject to any inspection for disease by our government inspector. Some 200,000 cattle pass annually over 229 miles of Canadian railway. They come from Chicago, and enter upon Canadian soil at Port Huron and Windsor, and pass out at Buffalo for the ports of Boston and New York. We have pointed out," they say, "the number of cattle that pass through Canada in bond. Why refuse to allow similar cattle to be shipped from isolated yards at Longue Point, where they would have the benefit of a thorough inspection, as against none?" The presence of a small evil can never be made a justification for the adoption of a larger one. The Canadian government should at once take steps to see that cattle shipped in bond should be inspected before they are allowed to lay a hoof on Canadian territory. We have observed with pleasure the firm stand the Dominion Minister of Agriculture, the Hon. John Carling, has taken on this question, and we would urge the desirability of still further lessening the chances of this fell disease getting a foothold in Canada. As to the advantages urged, the circular states that there would be an increased revenue at the St. Lawrence ports, a bigger traffic on the Canadian railways, greater impetus to the shipping trade of the St. Lawrence, a good thing for the farmers and millers in the vicinity of Montreal, and more business to the insurance companies; but what, we ask, of the vast interests of the feeders and exporters who profit to the extent of from ten to twenty dollars per head on every animal exported through the present clean bill of health that Canada can show? In the same circular we notice an appeal to Canadian patriotism, asking is it loyal to build up the trade of the ports of New York, Boston, and Portland? We, in turn, appeal to the same strong sentiment, and ask is it loyal for Montrealers to build up the trade of their city on the sacrificed body of one of the greatest interests of Canada? Remember that during the years 1887 and 1888 the United States government has expended nearly one million dollars in attempts to eradicate pleuro-pneumonia, not to mention the millions of dollars that have been spent since its first introduction in 1843; think of the fact that 150 cattle, more or less valuable, have been slaughtered in Great Britain during the last four weeks, not to speak of the vast expense and trouble it has given them since its first introduction, nearly fifty years ago, and while doing this the importance of the heritage we have in our climate, and other healthy conditions, will be the more appreciated, and thought more worthy of being carefully guarded. As soon as our neighbors to the south realize the truth of the whole-

some advice given them by the *Breeders' Gazette*, and at once adopt stringent measures to wipe out this foul disease in such states as New York and New Jersey, then Canadian stockmen will, no doubt, be welcome to endorse such a scheme as that before us.

### Rambling.

#### HEREFORDS AT "THE PARK."

This herd, owned by Mr. F. A. Fleming, of Weston, is in fine condition. The encouraging feature at the present time is the large number of calves that are coming to hand. The lack of this is the great sorrow of the stockman who is found very much in the show-rings, and who keeps his cattle fed very highly without an adequate amount of exercise.

The bulls in use are Conqueror 2nd 33482, a son of the Experimental Farm bull, a three year bull Lord Fenn 29030, by Downton Boy (5877), 4434, and Wilton Hillhurst 36125.

beyond what we expected to find in this province. The Smith Brothers are showing most excellent judgment in their selections, and have spared no pains to secure animals coming down from an ancestry renowned for performance at the pail. This will be at once apparent when we mention that the blood of the renowned Mercedes, Mink, Netherland Aaggie, Wayne, Clothilde, Siepkje, Artis, Tensen, and Ykema strains flows freely in the veins of the animals of this herd.

The stock bull, Mink's Mercedes Baron, the sweepstakes silver medal bull at the Provincial Exhibition in 1889, is very perfect in his development, and is come from milking strains of much renown. Some of the females are of great beauty and size, as Belle of Orchardside 2nd 6256, H.F.H.B., the first Holstein cow in the land in the show-rings of 1889. Others of them are noted performers, as Belle of Orchardside 5809, H.H.B., with a record as a two-year-old of 1037¼ lbs. in 30 days, and Onetta 1816,

There are a number of Holland bred cows in the herd, which are proving themselves most excellent breeders. To enumerate them would prove tedious, as the cows, heifers, calves, and bulls, young and old in the herd, number now about 65 head.

The stock bulls include Prairie Aaggie Prince, No. 2, H.F.H.B.; African Prince, No. 1270, H.F.H.B.; and Netherland Statesman's Cornelius, No. 6337, H.F.H.B. The first is a magnificent animal, and was never beaten in a Canadian show-ring, and the second is imported from Holland.

THE CLYDESDALES OF R. BEITH AND CO., BOWMANVILLE.

The imported Clydes of this year are this year again animals of great excellence. Messrs. Beith seem to aim at getting the best animals they can find, and their success in the business is a striking comment on the judgment which they show in making selections.



THE SHORTHORN BULL "PINNACLE."

Winner of First Prize at Birmingham Shorthorn Show and sale 1890. Sold for \$3330 for exportation to South America.

Reproduced from London Live Stock Journal.

Miss Broady, the famous prize winner 23852, is still in the herd with her great wealth of flesh, and also Miss Broady 2nd 26399, imported in dam, and a fine rangy two-year-old, Miss Broady 2nd, along with a large number of good females, and a few young bulls. One or two pens of one year heifers show much promise.

Sales from "The Park" are largely for the American market, although for producing shipping steers to be finished on grass, as is largely practiced in some parts of Ontario, some of those young bulls had better be retained by Canadians. The normal average of the herd is about 60 head. The straightforward square dealing that has characterized the management of the herd, along with the good quality of the animals, leads former purchasers to come again when they wish to replenish their herds.

#### HOLSTEINS AT THE CREDIT VALLEY STOCK FARM.

We were not a little surprised at the perfection of the management of the Smith Brothers, of this farm, not that we had any misgivings as to the ability of these gentlemen, but the system practised and the fine shape in which we found things generally, were

D.F.H.B., with a milk record of 10,607 lbs. in ten months.

The excellent breeding condition of the herd may be judged of by the fact that but one animal is found in it which will not reproduce her kind, although the normal average of the herd is from 60 to 70 head.

#### THE HOLSTEINS OF THE SPRING BROOK STOCK FARM.

Mr. A. C. Hallman, of the firm of A. C. Hallman & Co., New Dundee, is plying his youthful energies with his accustomed vigor in the management of this herd. Having won sufficient laurels in the show-rings of former years, Mr. Hallman is resting in this respect for the present. His herd does not, as a consequence, contain any animals dangerously fat, and the calves at the Spring Brook Farm are coming both thick and fast.

The herd is built upon a succession of importations, that of 1884 coming direct from Holland. It contains descendants of such famous families as the Netherland Prince, Royal Aaggie, Billy Boleyn, Artis, Alexander, Willem 3rd, Empress, Johanna, Clothilde, and Lady Fay.

The famous Sir Maurice (4721), by Lord Erskine (1744), has been sold, and has gone west for the improvement of the horses of Wellington. The four-year-old Sir Walter (Vol. XIII.), 1st at London and Toronto in 1889, is a wonderful mover for a horse of his weight. His good ribbing, good back and quarters, give him a fine balance of adjustment. He is too good an animal to be allowed to go from Ontario.

The Knight of Craighburn (5118), by Sir Wyndham (4728) Vol. VIII., is a heavy horse and well come. The three-year-old Ardlethen Boy (5493) Vol. X., is of strong type and fine development. He is by McCamon (3818) Vol. VII. The four-year-old Earl Lennox (6710) Vol. XI., is a pretty horse with fine form and limb. The four-year-old Eastfield Style (6723) Vol. XI., by Ghillie Callum (3629), has won many prizes in Canadian show-rings. Candlemas (5614), also four years old, large in body, and strong in limb, is a useful horse. Renfrew Gallant (Vol. XII.), the same age, is neat and shapely, with no undue weight, and crowned like all the others with grandest pedigree. Eastfield Chief (6715) Vol. XI., is cast in



an excellent mould, being muzzled excellently and carrying abundant silky hair. Eastfield Laddie (6719) Vol. XI., is a neat close coupled horse, three years old and by Old Times (579) Vol. I. Lord Gray (6965) Vol. XI., McCulman (6995) Vol. XI., and Clyde Admiral Vol. XII., all three-year olds, are like the rest, admirable specimens, and the same may be said of those not mentioned here. Indeed there are no culls and none inferior, and the excellence of the breeding may be inferred from the frequency with which such names as Prince of Wales (673), Lord Erskine (1744), Darnley (222), McCamon (3818), Lord Hopetoun (2965), and one or two scores of others almost equally good, occur in the pedigrees.

Of the females, Maria, Vol. XII., two years old, by Blantyre (2283) Vol. V., is one of the most shapely Clydes ever brought across the sea.

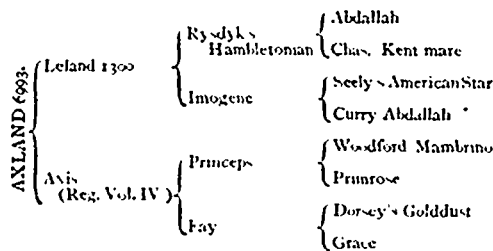
THE CLYDES AND SHORTHORNS OF MR. JOHN DAVIDSON, BALSAM

*The Clydes.*—There are probably half a dozen pedigreed Clyde brood mares at this farm, and all possessing that goodness of quality which to so great an extent has characterized the Clydes, bred both here and at the home of James I. Davidson, near at hand. Four of the mares have young foals at foot. The stallion Lewie Gordon has recently been purchased from Sorby Brothers, and he has wonderfully developed of late. He is also excellent in pedigree, as will be clear to those who trace carefully the performance of his ancestry.

*The Shorthorns.*—We were amazed at the perfection of the Shorthorn heifers of this herd. There are half a dozen of them one and two year old, which for quality, that thing which is always more easily felt than described, would perhaps puzzle any Shorthorn herd in Canada to produce the like. They are of Cruikshank and Cruikshank-Campbell strains, which almost means that they are Cruikshank strains. One of them especially, a two-year-old roan, a marvel of perfection, is one of the most perfect handlers ever touched by hands. If Mr. Davidson is successful in breeding from these, he is soon going to have a grand herd.

ROSEHILL STOCK FARM.

This farm is situated about a mile or so from the bustling town of Galt, and is approached by a beautiful rising walk that affords at every step a captivating view of the surrounding country. The proprietor is Mr. J. C. Dietrich, of the manufacturing firm of Messrs. Dietrich & Shurley. At present the line of breeding mostly followed is the production of good serviceable drivers for the American market. At the head of the stables stands the standard-bred stallion Axland (6693). His pedigree is as follows:



Axland was bred by Chas. Backman, the proprietor of Stony Stud Farm, N.Y., the former owner of the now famous Electioneer, of Palo Alto Farm. Leland, the sire of Axland, was got by the well-known founder of the Hambletonian family, Rysdyk's Hambletonian 10, while, through his dam, he traces to Seely's American Star, thus combining that blending so eagerly sought for now, the Hambletonian-Star cross. Through his dam Axland traces to almost equally

fertile sources of trotting blood. Princeps, the sire of Axland, is the present headlight at Indian Hill Farm, Kentucky, and is giving a good account of himself there, being now the sire of six inside the narrow circle of 2:20 and better, including Trinket 2:14, while his speed-producing get are many. On his dam's side also Axland traces to the favorably known family of Golddusts, of Morgan extraction, and further, through the mare Grace to the far-famed sire of producing dams, Pilot Jr. It is not necessary to say more of the ancestors of this horse to warrant the statement that his breeding is a happy combination of the best. In appearance he is a beautifully finished horse, a dark brown in color, and clear of all markings. He has all the spirit and quality of a thoroughbred, with the conformation and breeding of the trotter. An intelligent face, mild, though clear eye, denotes that Axland is not one of the rattle-headed class, while his muscular and bone development and rangy appearance proclaim his value as a getter of superior driving stock no matter how cold the blood of those given him. Another stallion here was Captain, by Victor, grandson of Volunteer, dam by Eclipse. This horse is a rich chestnut, extra well-developed for a two-year-old, as he stands fully fifteen and a half hands, and has all the appearance of a matured horse. The stables also contain a number of good brood mares, including Nellie Golddust, by Dorsey's Golddust, the founder of the Golddust strain. It would be going too much in details to mention all the colts, but it may be said that they all, more or less, showed a repetition of the good qualities of their sire, Axland. They were all possessed with his characteristic freedom and rapidity of stride. And the fact that they are all from mares of indiscriminate breeding is a strong testimonial to Axland's prepotency. A splendid pair of small drivers had just been sold at the time of my visit, and a neat span they made. Mr. Dietrich also holds for sale a strong, nice bay gelding of the hunter stamp, that would weigh about twelve hundred; and another excellent driver, rangy, a nice seal brown, and of splendid action.

MR. SADLER'S SUFFOLK STALLIONS.

It is stated by reliable authorities that over five times as many Suffolks left Great Britain for America last year than ever before, and this certainly indicates that their qualities are being appreciated on this continent. Few importers have done more to popularize this breed in Canada than Mr. Sadler, through the importation of horses of merit. Young Hero (1515) is well-known to most Canadian horsemen. At the time of our visit he was in excellent trim. A pen description of him cannot do honor to the subject. He has a very intelligent and expressive face, full neck, and crest firm with muscle. In foot and limb he has the best of bone, while his arm and gaskin is very muscular. He stands over sixteen hands, on short legs, but is deep in the body, while he weighs over twenty hundred. Cupbearer III. (566) was his sire, and his dam was Butler Moggy (326). This stallion has covered himself with honors in the showing, having won seventeen first-prizes, three second, one third, two specials, eight diplomas, one gold medal, four silver medals; and also in England as a three-year-old he captured a valuable silver cup. Rosehill, another stallion at these stables, is a get of Young Hero (1515), dam Spark, by Boucher's Suffolk Punch. This stallion is a beautiful rich chestnut in color, standing fully sixteen and a half hands high. He has a splendid appearance, with superior development of bone and muscle. He also has made a glorious record, being first at Industrial '85, first in class of ten at Columbus, Ohio, '86, first at Toledo Tri-

State Fair, and second at Provincial (Guelph) in class of fourteen the same year. In '87 he won the red ticket again at Toronto Industrial, and followed this up the next year by securing first and silver medal at the same exhibition. Mr. Sadler also had a spanking pair of blacks, one by Canada Southern 2:35, and the other by Orpheus 1416, by Almont 33. They are an excellently matched team of finest quality, and best of action. Another bay mare by Hart's Messenger, dam by Rifleman, was also in these stables. She is a beautiful mare, high in quality, stylish in appearance, and quick in action.

The Shorthorn Bull Pinnacle.

This distinguished bull calf was bred by John Game, of Great Rissington, Gloucestershire, and was sold to Messrs. Yeomans for \$3,330 to go to South America. He was calved July 30th, 1888, being by Rissington Lad 4th 56410, (who, with his twin brother, was sold at Bingley Hall in 1888 for £339), and out of Pink 52nd, by Nonpareil, of the celebrated Mason Pye family. He is described by our London namesake as being dark red in color, and a level, lengthy bull, with good head and horns, even top, wide in front, and with good flesh and hair. He was successfully exhibited last year, and it is said that he was so much thought of at Great Rissington that he was mated with one of the best heifers there.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

Seed Time in Manitoba.

THE STALLION SHOWS.

(From our own correspondent.)

Seed time, though close on a month behind last year in coming, was all that could be wished when it did come, and there never was a season when land was in a better state of preparation. It is alleged by those who ought to know, that there has been three feet of snow in many parts of the province this season, and, in an ordinary season, this would have made a big store, melting so late as it did but this year the streams have scarcely moved above their ordinary low level, and there are, in the south-west of Manitoba, stretches of country that are actually too dry for a free germination. All within 60 miles of Winnipeg the snow has been most abundant, and grass and grain must do very well indeed. We have not any bonanza farmers here and don't want them, but McLean and McRobbie, at Portage, will seed 1800 acres, and Messrs. Springstein, Sorby and Campbell Bros., 800 acres each. The real strength of this country lies in the half section men, and, where families and groups of old neighbors from the east have settled, make by far the most pleasant settlements every way. We are having a considerable influx of good settlers from the east and some from the old world, too, but none that we value so much as the ready-handed men from the east, with their carloads of stock and outfits.

Besides the work of seeding, which will be got through in good time, our attention during the month has been taken up here and there with local stallion shows, about a dozen in all. In outlying districts there are from 6 to 12 such horses present, some of them rather better than their pedigree, at least, to look at, and some of which the pedigree is the best part. At such a comparatively low place as Elkhorn I found two pedigreed Clydes, and a string of pedigreed mares fit to be seen anywhere. The horse, as a rule, partakes of the nationality of his owner. Mr. Head, of Rapid City, who brought in some very well bred Clyde mares, and had last year very hard luck with them, has got them on a different tack now. They either work for their living or "rustle" for it all through winter, getting only a moderate allowance of hard feed, and are doing well every way. He wants no more mares stuffed for sale, and finds that constitution in the colt can be more certainly relied on, the more rough the fare of the dam. A good few mares have had, last winter, too much of this mode of promoting constitution, for feed has been both scarce and dear, and stock has been pinched accordingly. Big herds of cattle, of all ages, and strings of colts are now going to and fro, being taken back to their homes, on old farming districts, from the places where more abundant food necessitated their being wintered. Baie St. Paul, the great northern lakes, and Lake

Dauphin, have wintered some thousands in this way, hay and water being always in reach, and wagon loads of early calves head the homeward bound procession.

Our government has come down pretty liberally with \$7000, to pay premiums for the contemplated fall show at Winnipeg. They take no other hand in it, and it must be controlled by the city men who started the movement, the city itself passing a by-law to raise \$25,000 to put up the necessary buildings. It will take pretty live management to build and make perfect preparations for a good sized show in October, the earliest date at which the show can be held, but there never was any movement here before that had such hearty concurrence from people all over the province, and, with a good season, a very fine show may confidently be reckoned on.

Though the Portage Horse Show was the big event of the spring season, the three along the southern line, held at Manitou, Pilot Mound, and Morden, were still very useful. Along with some rather poor specimens there were some very good horses, both imported and Canadian bred, at all the places, proving that everywhere farmers who are careful of their breeding may have the best of sires if they wish to pay for them.

In the neighborhood of Manitou there are a good few cattle afflicted with about the same symptoms as la grippe in the human subject, and which Dr. Young, the local veterinarian, has no hesitation in pronouncing la grippe and treating accordingly.

The farming prospects for Manitoba were considerably improved by a few moist days following a severe wind storm that came up from Dakota on the 19th April. From broad casted and harrowed land, a good deal of the surface mould was carried away, but on press-drilled land, especially where the drilling ran east and west, no harm resulted from this cause.

### Better Accommodation for Cattle Exportation.

The accommodation at Montreal for the exportation of live stock is not in keeping with the importance of this industry, and it has on more than one occasion given rise to discontent on the part of exporters. The Dominion Live Stock Association have taken the matter in hand, and we trust that the civic authorities may recognize clearly the magnitude of the interests at stake, and assist in affording exporters better wharf accommodation for the loading of cattle and sheep upon the ocean steamers. The association have advanced the following well grounded arguments in a circular, that has been sent to the Montreal Board of Trade, and other influential bodies:

To the President and Council of the Montreal Board of Trade.

1. The live stock industry has assumed gigantic proportions within the past few years. The season of 1889 showed an increase of 25,000 head of cattle and 13,000 head of sheep. The total value of live stock shipped from this port in 1889 was about \$8,000,000.

2. Canada is destined to be a great agricultural country. Farmers must of necessity raise a certain amount of stock, as root and grain crops impoverish the land whilst cattle enrich it and pay the farmer equally well; therefore we believe the export of live stock is sure to continue to increase. It interests us as live stock exporters and you as representative citizens of Montreal in providing proper facilities for the handling of this important industry.

3. In view of the contemplated harbor improvements, we deem it a proper time to bring the matter to the notice of your board. We respectfully ask that wharves be set apart (say at Hochelaga or Windmill point), where ocean steamers could receive their living freight after the general cargo had been completed. Both railways should have access to such wharves. Union stock yards would be built and the animals would be put on board direct from the sheds, thus effecting a great saving in time and protecting the poor dumb animals from all the abuse and rough usage that they are at present subjected to. This would centralize the business and reduce the depreciation and mortality to a minimum.

4. The custom of loading cattle and dead freight at the same time is disastrous to us as cattle exporters. In most cases the animals are kept upon the wharf for four or five hours under a burning sun, tramping through general cargo (which is usually littered all over the wharf), such as fine clay pipes, sheet and

scrap iron—horning, cutting and maiming themselves, and very often jumping into the river. All the lots of cattle have to be kept separate. This is no easy matter considering the number of teams that are continually driving through them.

5. The abuse the animals receive at this port, owing to the present system of loading, put them in anything but fit condition for the ocean voyage and the English and Scotch markets. In many cases large numbers die from exhaustion. Witness the mortality on the steamship *Carthaginian* last year, in which over 180 head of cattle died between here and Quebec. This was largely due to the animals having been heated up on the wharf previous to loading, and to the fact that the steamer had not completed her cargo, and had to remain at the wharf for several hours after the cattle were aboard. Cattle that are heated and excited at the loading depreciate very much in value, and where a heavy mortality occurs the balance usually land in a wretched condition, thus entailing heavy loss to the owner. We can instance several similar cases of heavy mortality during the past six years, but we think it is not necessary, as any person who has occasion to frequent the wharf will readily admit that a great improvement is required in the loading and handling of cattle.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

### A Sheep Rack.

I noticed the plan you gave of a sheep rack modelled after those in use at the Ontario Agricultural College; as I think ours is better only on the ground that it is easier made and cheaper, I forward it to you. It is so very simple, besides being very cheap, that a handy boy could make it in a day. It will accommodate 20 sheep. The ends are made of 4 x 4 scantling 12 feet long, cut in two and halved together as in Fig. 1.

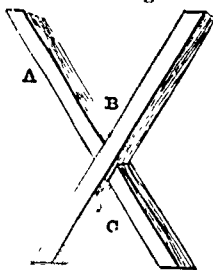


FIG. 1.

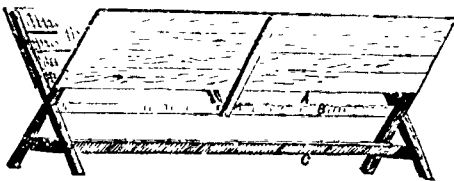


FIG. 2.

Four boards 15 in. wide and 12 ft. long, will do for the sides (A Fig. 1.). Have an opening (A Fig. 2.) about 4 or 5 inches wide, so that the sheep can pull the feed out nicely. Nail up the outside ends at B and the inside at C, then get a plank 12 or 13 in. (Fig. 1) in width, and put 4 or 5 in. sides for a trough, as in C Fig. 2., and make rests for it at each end about a foot from the ground. Bore a hole through the boards at C Fig. 1. and into the end of the trough, and put a pin in each end so that it can be removed if necessary. Set a board, B Fig. 2., about six inches wide, into a groove just where the scantling cross above the trough to prevent the sheep jumping through and getting fodder in their wool. A three inch piece nailed across the top and down to the sides meeting at the ground-board is necessary to strengthen it. The total cost of the work is not quite \$2.00, labor included, and being close at the sides, no chaff or dirt falls upon the sheep, and fifteen or twenty sheep can feed from it at once.

JAMES BOWMAN.

Mount Forest, Ont.

Mr. D. P. McPHAIL, Vernon, Ont., writes: "I am two years in arrears; you will find 3.00 enclosed with thanks, wishing you every success and hoping that the *Stock Journal* may have a widespread influence. It should benefit the farming community very much."

### Dominion Live Stock Association.

We have received a number of communications in regard to the Dominion Live Stock Association, and deeming the matter of general interest, we would say that to become a member the candidate must be vouchered for by some member actively engaged in the stock trade. His name is placed before the Executive Committee. If accepted, he is entitled to the rate of one cent per mile on the C. P. R. and G. T. R., provided he has owned and shipped ten car loads of stock over each road. In other words he must ship in his own name, ten carloads of stock over each road, in all twenty cars, before he can secure the cheap rate. The admission fee for members is ten dollars, and the annual subscription is three dollars. In a recent letter the obliging secretary of the association, Mr. W. Cunningham, says: "Our association is of immense benefit in case of united action being required, and it is well worth the subscription price of three dollars per year to meet regularly, and discuss matters of interest to the trade, even without the privilege of cheap rates. The outlook for the cattle trade is not particularly bright, at least not for those speculators who have bought so many cattle at 1c. to 1½ c. per lb. dearer than last year. Of course the farmers and others who have had the distillery cattle, have benefited largely by the jealousy and competition. I think the markets in England and Scotland will be fully equal to last year, but I do not believe that cattle that are bought at 5 or 5½ cents can make money. Last year the top price was 6½ cents. It would take 7 cents to make money this year for the exporters."

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

### Raise the Quality of Beef.

Now that times are hard, prices low, and the feeders of fat cattle have difficulty in making their sales show a profit, it is more than ever necessary that only the best quality of beef, that which will bring the top price, shall be produced. If any kind will leave a margin of profit, that certainly will. What kind of beef is most in demand? What quality will bring the best price and make the most profit? Animals of medium size, fleshy, and young. Those that will give the butcher rich juicy meat and plenty of it on the best cuts, moderately fat, and if marbled, fat and lean mixed, so much the better. The Christmas fat ox and heifer have had their day, and it is past. In years gone by, the feeder who could bring out the fattest, heaviest animal won the prize, and sold for perhaps ten, twelve, or fifteen cents per pound live weight. The butcher who purchased hung up the animal as an advertisement, and never expected to get cost from the sale of the meat. It was decorated with gay rosettes and many colored ribbons. The purchaser of each portion was entitled to have his name displayed thereon, as buying so many inches of solid fat. Similar animals may still win the prizes at our Fat Stock Shows, but no longer can the feeder obtain such prices. Householders are more anxious now to get meat that will be pleasant and palatable. In our larger cities especially, more quality is needed in the beef. A few cents in price is not thought about when a first class article of food can be produced.

At the last Christmas market at Smithfield, London, England, there was a great demand for animals weighing from ten hundred to thirteen hundred, live weight, young well-bred, well-fed animals. Quality of beef was wanted. The prize animals were neglected. Animals weighing a ton, fat as they could be made, were not looked at. Animals half the weight, not over-fat, with rich meat, were eagerly picked up at big prices. Such animals can be produced by Canadian feeders and farmers in large quantities. For such there is always a good demand. They must have quality, a large proportion of the blood of our best beef breeds, be well-fed from the day they are dropped, and ready for the butcher under three years old. For a good second quality the dairy cows of the milk and butter districts, crossed with a good beef breed, will make a suitable animal. If our feeders will take up this matter heartily, instead of our shipments to England being 85,000 head, that number might easily be doubled, and the profits of the feeder more than doubled on every animal. We have far too many scrubs, they cannot be made to pay. Feed the kind and quality needed by the consumer, and price and profit will be all right.

Guelph, Ont.

D. McCRAE.

For the CANADIAN LIVE STOCK AND FARM JOURNAL:  
**Prairie Stables.**

LIKE SOLOMON'S TEMPLE BUILT WITHOUT SOUND OF HATCHET OR HAMMER.

As some of our intending prairie farmers would like to know how to build a cheap and comfortable stable for the prairies, I shall try to give you a plan of a complete prairie stable, root house, and hay shed. As most of your readers will know the chief item of expense in building with us is that of getting the lumber, but this difficulty is surmounted in the plan I submit. At the door under the shed is a good well, and as the water runs eastward from there it is always pure, and the manure from the stable is taken out at the east end, so that everything is kept clean on the west. It will be seen that there are two doors in the east end to admit stock. There are eight posts upon which you can attach wire or a rail in three sections marked III. Fig. 2, for the purpose of keeping stock from tearing the wall with their horns. Before building the walls put up the frame as shown in Fig. 1. Cut the upright posts long enough to be placed in the ground, say eighteen inches apart, so as to hold your walls steady until they have settled, as they will settle down four or five inches after being built. The posts for beaming up the walls will be 6 1/2 feet, and the centre two will be 12 1/2 feet above ground. In each wall there is a pole marked B fastened to the post at each wall, and it runs the full length of the inside of the stables, to prevent cattle from tearing the wall in going out. C C C are poles or cords to bear up ceiling F. The ceiling F is raised over the horses to prevent the latter from striking their heads. D D are cords to bear up the rafters. E E are sods upon the roof. You can place willow or birch upon top of the rafters and over that a little straw or slough grass, so as to make a smooth surface for the sod. The sods should all be ploughed up with a breaking plough twelve inches wide, and four to six inches deep as may be best. These sods can be obtained around any slough or low ground. After ploughing them take your spade, turn the face side towards you and cut your sods straight down and square across. To fit a sod around any post cut a notch in it. These sods are placed upon the ground (as shown in ground plan Fig. 2), so as to break joints. The stable wall is two sods or two feet wide. The root house is four sods or four feet wide, and built two feet high at rear and sloped up to over six feet at the wall of the stable. To bear up the wall, place in the posts. Two cords are then run lengthwise, and upon these place the rafters, and cover same as the stable, with the exception that the roof is made stronger and covered with three tiers of sods with joints broken. These sods can be easily lifted in your hands, and placed in a wagon and hauled to the desired site. Take a spade and dig out about two feet in the root house, and place the soil at the back of the house, and opposite each end of back wall, so as to raise up the wall wide enough to admit a wagon and team when hauling in roots. This will keep the wall warm and make unloading much easier. Fig. 1 represents end of the stable as if end wall had been taken down. E E are the sides of the stalls. It will be seen in Fig. 1 that every fourth sod is laid acrosswise so as to tie the wall together. Care must be taken to fill all loose joints so as to prevent air from passing through, also to level each course of sod on top to make a level bed for the next. B B in Fig. 2 is feed alley, C is feed box, D is stall for work team, eight feet wide, and handy to the door. The rest of the stalls are seven feet, except the one opposite corner to D, which is eight feet wide. The full width of the stable inside is thirty feet. The four mangers are each two feet wide; A A are the cross alleys. There is one window in the north side at west end of the root house, and one in the door at the north-east corner. These will give ample light on north side. Cut a hole in the door the same size as the glass in the window sash, and tack sash on the door, then take four pieces 2 x 2 ft. halve them together at corners, same size as sash, and place them on the sash, and with four small bolts fasten all to the door. Then take a small wire (1/8 in.) and run this across over the window four inches apart, on each side of the window. Then run one across the opposite way in the centre of the window, taking a turn around each wire and fasten each

end to keep all in place, and protect the window from being broken. Then you can place windows on the south side to suit your taste. To put hay in the loft you have a small door in east end. Fig. 3 is a hay shed at the west end of the stable, made of six posts and six cords (A). These cords may be cut to suit the size of the shed. The one end will rest on the stable and the other on posts placed two feet in the ground, and of the same height as the stable. Care should be taken to cover over the entrance to the stable, and hang on a door at the entrance. This is all that is necessary, as we have scarcely any rain here in the fall. By putting the hay in the shed, commencing to build in around the walls first, and afterwards filling in the centre, this will come out first, leaving that at the walls up to keep out snow and wind. The shed is covered with a few poles, and

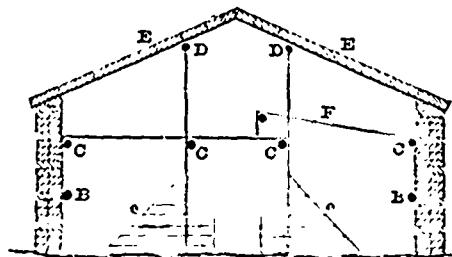


FIG. 1

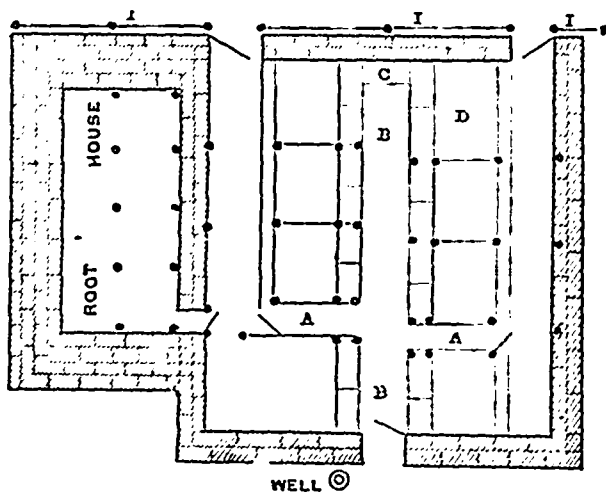


FIG. 2

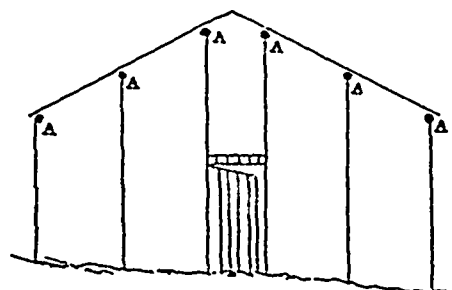


FIG. 3

brush then put on, and then a little hay, to keep out snow, and thus you have a comfortable place to feed from through the cold weather.

Saskatchewan, N.W.T. J. CASWELL.

For the CANADIAN LIVE STOCK AND FARM JOURNAL:  
**The Improved Large Yorkshire.**

Some months ago a desire was expressed in THE CANADIAN LIVE STOCK JOURNAL, that some breeder of the Improved Large Yorkshire would give an account of the origin of the breed. I had been in hopes that the subject would have been taken up by a more efficient pen than mine, but as several months have now elapsed without any breeder taking up the

gauntlet, and lest such reticence might be detrimental to the breed, I shall attempt in this paper a short account of what is known of its derivation. The works which treat fully on the various breeds of pigs are few in number, and in none that I have met with is there any complete account of the descent of the different varieties. To form a consecutive narrative, one is compelled to cull a little from all, and although much is of necessity left to conjecture, yet sufficient information is afforded by standard authorities to enable one to glean as complete a history of the Improved Large Yorkshire as of any other variety.

Without going back to the wild hog, from which all naturalists agree that our domesticated pigs are descended, it will be sufficient to commence at a much later period. Years ago, and prior to the time of Copland, there was a breed of pigs which existed over the greater part of England, and possessed many of the traits of the wild hog; they were long and bony at the legs, light as a greyhound in the carcass, and had long heads and large flapping ears; their chief recommendation being their prolificness, and the care they took of their offspring. Copland, in his Agriculture, Ancient and Modern, remarks that he recollected a similar breed in Ireland, but at his time it was seldom to be met with, a fact which may be probably accounted for by the improvement spoken of by Morton and which is alluded to further on in this paper. Coming to a later period, it seems unanimously agreed by all authorities on live stock, that a large breed of pigs prevailed in most of the English counties, which, while undoubtedly the same breed yet exhibited certain minor differences from the local circumstances to which they were subjected. Of these, the old York or Lincolnshire pig, sometimes called the Wold pig, which abounded in the Lincolnshire Wolds and in Yorkshire, was one of the largest types, having long legs, flat sides, narrow backs, weak loins, and large bones, very long from head to tail, chiefly white in color, with coarse curly hair, but were tolerable feeders. In Leicestershire, Shropshire, Gloucestershire, Herefordshire, etc., different types of the same breed prevailed, while that in Cheshire was the largest of English hogs. The latter stood from 3 1/2 to 4 1/2 feet high, were long bodied, narrow backed, slab sided, large boned, and long limbed; their heads were large and their broad pendant ears hung over their eyes, their skins being loose and coarse, but they fattened to an enormous weight, without requiring a greater proportion of food than a smaller breed; their color was usually white with patches of blue or black. According to "British Husbandry," published under the superintendence of the Society for the Diffusion of Useful Knowledge, importations of Chinese pigs were made to England long prior to 1841.

There were two distinct varieties introduced, the white and the black, the former being better shaped than the black, but less hardy and prolific; they were small limbed, ears and head fine, round in the carcass, thickskinned and head so imbedded in the neck that when fat the end only of the snout could be seen, but they were for the most part much smaller than the common run of European swine. About this time, breeders of all kinds of pigs appear to have applied themselves towards remedying the undesirable qualities of their respective breeds, and these Chinese importations gained great popularity, experimental crosses being tried with them on nearly every variety; these were doubtless attempted in order to meet the then demand for early maturity, although even at that period it is stated that for bacon the Yorkshire was preferred (Stevenson's Survey, p. 537). Morton, in his Encyclopedia of Agriculture, published in 1855, mentions that the large breed, or Wold pig, had in his time made as great an improvement as any breed, and had become the most profitable kind, being then known as the improved Wold pig; he describes it as being well formed throughout, head of fine length, with pleasant, mild, docile countenance, ears drooping but not too large, back broad and very lightly covered, with wide well-set rump and chine, loins broad, ribs springing, deep sides and full chest; color, white; hair long and thinly set; it, continues he, is a very fine specimen of the pig, grows very fast, feeds rapidly, the quality of the pork being remarkably good, and having a full proportion of fine lean meat. Whether this improvement was effected by selection or by crossing, it is impossible now to be ascertained.

the alleged cross with the Berkshire is hardly to be sustained, and if any cross was used, it is much more probable that a dash of the White Chinese would have been employed. I know of no direct evidence of any such foreign infusion, and even if such a means had been adopted, the foreign element must have been utilized to a very limited extent, else it would naturally be expected that not only the outward form would have been changed, but also the characteristic qualities of the Yorkshire would have been completely lost. Again, when we consider the many different types of the Yorkshire distributed over the different counties, it may not unreasonably be concluded that the improvement was effected by a judicious selection of the several strains; for comparing the improved Large Yorkshire of the present day with his ancestors, we find that although much improved in form, he still retains several of the characteristics remarked on by standard writers, and while most of the objectionable features of the old type have been eliminated, all the more valuable qualities have been retained; the long head of the early British pig has been shortened, while the flapping ears have been reduced in size and are now neither drooping or pricked, but the length and depth of side, the large proportion of lean, and high quality of its meat as well as its prolificness and care of its offspring, so conspicuous in its ancestors, are still eminently the characteristic of the improved Large Yorkshire. The established color of this breed is a pure white, but even now an occasional instance occurs of a specimen with a blue or black patch on the skin; this, although undesirable in a stock animal, is no proof of impurity, but rather the contrary, being a clear case of atavism, or throwing back to the old Ches-hire pig, whose color, I have before mentioned, was usually white with patches of blue or black. The history of the improved Large Yorkshire may briefly be recapitulated as follows: he traces his descent through the improved Wold pig, mentioned by Morton, to the old Yorkshire, which at one time was common over the greater part of England, the descendants of a breed of pigs which, in the words of Copland, was not only the principal breed in England, but also existed in Ireland, the direct descendants and possessing unmistakable traits of the wild hog.

AGRICOLA.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

### The Jersey at the Seaside.

Amidst rain and sunshine, good report and bad, from ninety in the shade of booming days to zero in the depression, Jacob S. Hart, the genial and plucky breeder of high-class Jerseys, has kept on through it all in the even tenor of his way, building up a herd of this desirable class of butter-makers, until to-day there does not stand in the whole Dominion a finer herd, or a better representation of the world-renowned St. Lambert Family than may be found at Saybrook Stock farm, situated on the Home Water of the picturesque "Lille Bras D'or." A book might be written describing the truly delightful situation of the farm, sheltered as it is by Iron Mountain, the lake to the front dotted with islands of emerald green. In all Nova Scotia, so noted for beauty spots, from the land of Evangeline to the wilder and storm-pest shore of Cape North, none excel the lakes and surroundings of the glorious "Bras D'or."

The large herd of Jerseys owned by Mr. Hart add not a little to the coloring of the surroundings, for who is there after all, that does not admire the deer-like form and graceful outline of the Channel Island beauties?

At the head of the Saybrook herd stands Oscar of St. Lambert, by Baron of St. Lambert, out of Cow-slip of St. Lambert. Again, as henchman to the great Oscar, Saybrook owns Jack Frost of St. Anne, a double grandson of Jack Frost of St. Lambert. The chief is amongst the best bred Victor Hugo bulls in the world, and the fancier of this great Victor Hugo Stoke Pogis cross only knows the merit of such a bull as Jack Frost of St. Anne to intensify the butter-producing property of a herd of cows, daughters of Baron of St. Lambert and Romeo de Bondir.

The herd consists of 35 females, selected for unusual merit, not only in point of size and breeding, but also as dams of more than common butter-producing qualities. Lilly Tully Montague, a daughter of Romeo de Bondir, Stoke Pogis' 3rd best son, (thought by many); Beautiful Bells, a glorious cow, with a butter test of 15 lbs., Mullberry's daughter, her

dam made a test of 21 lbs., and she held fair to eclipse her dam as a butter cow, Lilly Gibard, Cow-slip Pogis, Farmer's Daughter, Cow-slip of St. Lambert 2nd, and a host of others, out of which it would be difficult to choose, had one the pick for choosing, as all are so full of merit. Why, in the old booming days when Jerseys were Jerseys and quoted up to the thousands, the herd now to be found at Saybrook would have been worth \$50,000, if a dollar.

The cows are just the same, just as useful, just as beautiful as they ever were, just as much thought of for their truly great qualities as they ever were. True, speculators do not trade in them now, as they once did, and as they would again if they could only get so good a thing as formerly, but such a thing cannot well happen again. Real value, however, is becoming the standard for good Jersey cows, and from \$100 to \$300 are common quotations for good representatives of the Jersey family.

The St. Lambert family still hold the lead, and will for many a year to come, and owners of members of the tribe will find readier sales for their stock than for any other family of the same breed. Mr. Hart reports sales regular and with a tendency upward, finding no difficulty in disposing of his surplus stock, his buyers being principally dwellers in towns and villages, who keep one cow, and these he finds ready to pay him big prices for good samples.

Friend Hart never lost faith in the Jerseys, always believing they would come back to public favor, and he was right, for to-day no cow in all Canada has such a hold on the public favor as the beautiful little Jersey cow. Should you ever pass through Cape Breton, reader, mind don't fail to call at Saybrook, for if you love a Jersey, then will you see them here in perfection. Are you fond of angling? then there is no better place in all Canada for trout-fishing than that to which friend Hart can direct you, and if you wish to hear the language of John Hielandman spoken in all its perfection, as pure as at the Mull of Kintyre, then in picturesque Cape Breton it may be heard in all its Doric broadness and simplicity.

FARMER JOHN.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

### Selection of Breeding Pigs.

In commencing the breeding of pigs, as of all other live stock, the first thing to be considered is, have we the right kind of stock to make a commencement with? Perhaps, therefore, a few words on the points most essential to a good brood sow may not be out of place.

Professor Long, in his admirable work on swine, "The Book of the Pig," quotes that famous old English writer of 200 years ago, Markham, as saying: "In the choice of your swine let them be large and long of body, deep sided and deep bellied, thick thighs and short legs, high, clean, thick neck, short and strong groin, and a good thick chine, well set with strong bristles." Such is the description of a good pig as given by an agricultural writer of the 17th century, and I do not know that we, in the 19th century, can improve on it very much; for, if our pork packers and bacon curers are to be believed, the pig they want for their trade to-day is the long, deep pig, with medium hams and a preponderance of bacon side.

Having, therefore, decided to select a sow that answers as nearly as possible to this description, what other points are we to look for in her? Well, first of all, if possible, select one out of a large litter, and endeavor to be sure that not only her mother, but also her more remote ancestors, have been famous for their prolificacy, and while considering this point, do not forget to make sure that your sow has twelve teats at least, as without that number she will be unable to raise a large litter of young pigs successfully. In addition to this, a good breeding sow must possess a strong, vigorous constitution, and it is also very essential that her temper be gentle, as it is, in my opinion, an almost hopeless task to attempt to raise a litter of pigs successfully when the dam is either too nervous or too savage to allow herself and her pigs to be handled quietly. Last, but not least, if possible, try and obtain a sow that possesses a good, straight, unbroken pedigree, for by this alone can you be in any degree certain that she will transmit her own good qualities to her offspring.

Having now decided on the various points that we desire in our sow, the next consideration is, how old must she be before we allow her to commence breeding? On this point we find that opinions differ very

considerably. Some well known breeders, such as Mr. N. Benjafield, of English Berkshire fame, and Mr. Fred Coate, equally well known fanciers of Black Dorsets, recommending the mating of yelts with the boar at the age of six months, while others, among them Col. Platt, the well known breeder of Large Whites, prefer not to allow their yelts to breed before they are twelve months old. The greater number of breeders, however, appear to take a course midway between these, and advise coupling young sows with the boar when they are eight or nine months old. Our own experience leads us to believe that this is the best age, provided that the yelt be strong and well grown; if otherwise, we should recommend allowing her to run a couple or three months longer, and in no case would we recommend breeding young sows before they are at least eight months old. Having obtained a sow that is, in our opinion, suitable to form the foundation of our herd, the next thing to do is to select the boar to breed her to, and here we require to exercise as much, if not more caution, as we did in selecting the sow; and yet, how often do we find it otherwise. A farmer will go from sale to sale and finally purchase a sow that is, in shape and appearance, all that can be desired, and then, when the time comes to breed her, does he take the same amount of trouble to find a boar that will mate well with her? No, indeed; in nine cases out of ten he will send his hired man with her to some boar that he has never even seen, and that may, for aught he knows, possess exactly the same weak points as the sow does that he is about to be coupled with.

I would, therefore, impress upon my readers as strongly as possible the fact that, as in cattle breeding the bull is half the herd, so in swine breeding the boar is to be considered at least of paramount importance.

In choosing your boar pig, always select one that, in addition to the necessary qualifications of form and shape, is perfectly pure bred, and no matter how perfect in form he may be, never allow yourself to be persuaded to use a boar that is the offspring of other than pure-bred stock on both sides. The following diagram (copied from "The Book of the Pig"), shows very clearly how different will be the result of breeding from pure-bred and from half-bred sires:

Mongrel	1	Half Blood	1	1/2 Blood	1	1/4 Blood	1	3/8 Blood
Full Blood	1	Full Blood	1	Full Blood	1	Full Blood	1	Full Blood
Mongrel	1	Half Blood	1	Mongrel	1	Mongrel	1	Mongrel
Full Blood	1	Mongrel	1	Mongrel	1	Mongrel	1	Mongrel

In the first case by using pure-bred boars continually, we get in three crosses an animal containing a very small admixture of impure blood; while in the second case, by using half-bred instead of pure-bred males, and mating them with common stock again, the progeny dwindles down to almost its original state. And yet, in how many cases do we find this practice carried out by our Canadian farmers. Sooner than pay one dollar for the use of a pure-bred boar of one of the improved breeds, they will use a half-bred at fifty cents because he is a good looker, quite regardless of the fact that he is as likely to throw stock taking after the most worthless ancestor he has on his dam's side, as he is ones taking after himself. Let me, therefore, impress upon the beginner in pig breeding the necessity of never using any but pure-bred males, and also of satisfying himself that the boar possesses those points in which the sow is lacking, as should the sow and the boar possess the same failing, that failing is certain to be reproduced in a marked degree in the offspring.

BLUE BLOOD.

### What the Aim of the Breeder of Pure-bred Dairy Stock Should Be.

Read by the Editor at the B.-S.-F. Breeders' Association meeting at Woodstock, March 27, 1890.

The leading aim of the breeder of pure-bred dairy stock, like that of all other honest toiling mortals, is to make his labor and capital as productive as possible, and to do that the chief considerations are the demands of the best market for his product. The most profitable market for the average breeder to cater to is that which owes its origin to the demands of the ordinary dairyman, and hence, in treating of this question, I shall first consider what the ordinary dairyman most wants, or, in other words, what is in most demand, and then endeavour to indicate the lines the breeder should strive to follow in seeking to meet these demands.

The most effective factors that determine the profits of the ordinary dairyman are the members of his herd.

The influence of the herd through its working capacity for dairy purposes will depend principally on the extent to which recourse has been had to pure bred blood. The successful dairyman, in the majority of cases, need be dependent on the breeders of pure bred stock only to the extent of requiring a pure bred bull to head his herd. In choosing a pure bred animal as his stock bull the dairyman makes the centuries of skillful breeding behind any well bred animal of pure breeding stepping stones to a higher development of his own. The pure-bred animal represents in the flesh the best thoughts and experiences of able breeders at work through long periods of time. In five years, by using pure-bred dairy bulls of a single breed and type, the dairyman may double the profit-producing power of his herd.

Seeing, then, that the ordinary dairyman must use a pure-bred bull on his herd to make the most profit, it is, then, important for the breeder to look into this matter, and note what are the attributes expected in a dairy bull for this purpose. This trade, like all others, may be cultivated and expanded.

In the bull that heads his herd the dairyman hopes to have all the good features of a dairy animal so intensified and fixed by breeding and management that, if used on common grade cows, each of the females produced will surpass its dam for practical dairy purposes. To grade up the working animals of his herd the dairyman must have a bull representing the highest development in breeding and individual merit for dairy purposes, and let it be remembered that the highest development of any characteristics is only possible by special breeding after a special ideal. Then, again, the dairyman requires this stock bull of his to have the power of transmitting his qualities without fail, and special breeding in union with vigorous constitution are the qualities that give strength to prepotency in bulls. The dairyman, then, wants a bull bred for a purpose, able to transmit it, and of such vigor and health as not to weaken, but rather add to, the constitution of his get.

The lines to be followed by breeders of pure bred stock seeking to meet the wants of the dairyman are:—

(1) Select and develop your cows for their special work as dairy animals.

(2) Breed with a view to concentrating these qualities, and with the object of securing their sure repetition.

In respect to selection, not only must the eye and hand be critically and intelligently used, but a further step must be taken, the cows should be tested to get at their earning capacity. See that the cows of the herd are of good size, strong but fine in the bone, broad loined, wide quartered, and deep, full barrelled. The cow with the largest storage capacity and the best developed digesting powers will give the largest returns. If she has the digestive ability to utilize her food, and the long udder to make use of the food she digests, then she will, as a consequence, have the tortuous milk veins, and, perhaps, the milk mirror that many attach importance to. Testing for quality and quantity must go hand in hand. For the ordinary dairyman seeking to grade up his herd the cream gauge will answer, but the breeder should surely spare the time and expend the labor necessary to determine and develop the butter capacity of each and every one of his cows by the scales, and actual tests by the churn.

By developing the cows is meant the gradual unfolding of their powers as dairy animals through tests, good feeding, and management. The chief concern of the breeder should be to develop the butter-producing capacity of his cows, for it should be remembered that the chief factor in determining the quality of the milk is that of breed and individual characteristics, and it is the policy of the breeders that fix the features of the breed. It has been shown by extensive experiments in respect to the production of milk, "that quantity is the result of food influences," while "quality is the result of the make-up of the animal." It is a sound principle that a cow that has been developed to her full capacity will give a calf whose chances of being a good dairy cow are far greater than one from a cow of equal merit otherwise, but not developed. All horse-men acquainted with the standard bred trotter know that developed sires, or those with records, are in far greater demand than those without a mark, simply because they are more likely to transmit their speed to their progeny, and so it is with cows. By training a cow up to her full capacity she is not only improved as a breeder, but also for practical dairy purposes.

In respect to the breeding phase of the question, both the selection and development, in union with the policy of the breeder, must be for a special purpose. It is best for the ordinary dairyman to get a cow that will meet all his conditions, but to do that he wants a bull that has been bred for a known purpose. It is a principle of heredity known to all breeders that only the fixed characteristics of a breed are certain of being transmitted, and hence the importance of breeding for a special ideal, so that the desired features may become fixed. In climbing the ladder of success it is said that man, in reaching for an upper round must let go his hold upon a lower. In seeking to develop a breed of dairy cows you must resign your hold on the lower rounds if you reach for a higher round, and, in other words, in breeding cows you will have to give up minor points in favor of major ones. To point the moral, it is a mistake to expect, by using a bull of beef form for a while and then one of dairy form, to get the all-purpose cow with the highest development in all directions. It has been stated that the dairyman wants a bull possessed of prepotency, so that the bull may graft his qualities on his progeny. Prepotency is dependent on the breeding, whether for a purpose or not, and also on vigor. A bull that has behind him a long line of ancestors that have been bred for a purpose will invariably throw stock of the best for that purpose. Constitution is a quality that all breeders should put a high value upon, and to secure the best development of this, careful breeding, good feeding, and healthful management are necessary. Breeding animals too young will show its effects in sinewy bone, decreased heart girth, and a weakened vitality.

If the breeder conforms with these ideas, and thus carefully considers the wants of the ordinary dairyman, and gives his closest attention to the meeting of those wants, I have not the least hesitancy in predicting that he will always find a market for his animals in Canada, for dairying with us has become one of our greatest wealth-producing industries, and it must become more so as our superior dairy products are recognized in the markets of the world.

### A Long Established Firm Strengthened.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

Sir,—I beg to inform you and your readers that, having been in active business for twenty-one years, as auctioneer and agent for the sale and purchase of the various pure breeds of this country, and having had practical experience before that, dating from 1852, I find it desirable to relieve myself, to some extent, of laborious details which year by year increase; I have, therefore, this day taken into partnership Mr. Jonas M. Webb and Mr. William Holmes, both of whom have, for some years past, been in my office, the former attending to the exterior, the latter to the interior department, and have thus become known to a large number of my connection.

I shall, however, still retain complete control of the business, and continue to devote my best energies to the advancement of the interests of our connection; my desire being to perpetuate the system of business which I myself have developed, and which I have found to work smoothly and well, to the advantage, I believe, of breeders and owners of herds and flocks in this country, and, I may say, in all parts of the world.

The name of the firm will now be John Thornton & Co., and letters in future will be so signed.

I beg to remain, yours very truly,

JOHN THORNTON.

7 Princess St., Hanover Square, London W., Eng.

### London Dairy Tests.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

As a reader of your interesting paper, I have been very much interested in the discussion of the London milk test, but I have been unable to see it in the light that any of your correspondents place it. Mr. Reburn says that he will show us that the Jersey is ahead by Mr. Cheesman's scale of points, as well as with Professor Robertson's, without taking the cost of feed into consideration, but I fail to see where his figures are correct; he adds up the per cent. of fat and solids and divides by four. He says he finds by referring to Professor Cheesman's report, that the average weight of fat and solids is about one-fourth the per cent.; it certainly is not. It comes out one-fourth with Jolie St. Lambert, as her milk in pounds was one-fourth of a hundred, but let him try it with the second cow, Portulaca, her per cent. of solids was 1.81, one-fourth of this would not be 0.45, which is the weight of solids, her per cent. of fat was 2.72, one-

fourth of this would not be 0.68, which is the weight of fat in twenty-four hours, per cent. means per hundred, and let Mr. Reburn figure it this way. If one hundred pounds milk made 13.81 solids, 38 lbs. (which is the quantity she gave in twenty-four hours), would make less, multiply 13.81 by 38, and divide by 100 will give him 5.24, multiply the per cent. of fat 3.72, by 38 and divide by 100, will give 1.41, which is weight of solids and fat in lbs. Figured in this way, which I think you readers will plainly see is the correct way, I will undertake to show Mr. Reburn that without taking the cost of feed into consideration, the Ayrshires by Mr. Cheesman's scale of points, would have come out ahead at London:

Total Jersey milk in lbs. 176, average per cent. of fat 4.70, multiply by 176 and divide by 100, would give	8.27 fat by 30 points	248.10
Average per cent. solids 9.07 x 176 ÷ 100	15.96 x 8	127.68
285 days calved, one point for 20 days		14.05
30 days gestation, one point for 20 days		1.50
		391.33
Total Ayrshire milk in lbs. 245, average per cent. fat 2.51, multiply by 245 and divide by 100, would give	6.85 x 30 points	205.40
Average per cent. solids 8.63 x 245 ÷ 100 = 21.29 x 8,	points	170.32
669 days calved, one point for 20 days		33.09
		409.81

Mr. Reburn reminds Mr. Guy that the Jersey cow Jolie St. Lambert stands to-day the sweepstakes milch cow of the Dominion, with a score of 113.38; she made this score at Kingston in 1888 in twenty-four hours, and by Mr. Reburn's figuring from the same scale of points, it takes Mrs. Jones' three Jersey three days to score 163.60. It is certainly a credit to Mr. Reburn that this cow stands the champion milch cow, as well as to the breed she represents, but we would remind him also, that the Ayrshire cow was second in the race, and only eight points behind the champion.

He also tells us that he is ready to meet all breeders by the rules as laid down by any of the three Professors; he may, but he will have to adopt a different style of arithmetic, before he can show us the Jerseys were ahead at London by Mr. Cheesman's scale of points, without taking the cost of feed into consideration.

GEORGE STERL.

Glenboro, Manitoba.

### Improved Yorkshires.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

Before proceeding to discuss very briefly the question of Improved Yorkshires, permit me to express to some kind friend in the Dominion, my thanks for so kindly forwarding to me copies of your most valuable and interesting JOURNAL. I can assure you that it is a most welcome addition to my list of home and foreign live stock and agricultural newspapers, of which some twenty-five per week arrive at Holywell Manor.

I was glad to find that you had in an editorial in your December number, called attention to the desirability of the farmers in your country paying greater attention not only to the breeding of pigs, but what is of still greater consequence, the breeding of the best possible kinds. More wholesome advice could not well be given, nor it appears more needed since from what Mr. W. Davies, the head of the firm of Messrs. Davies & Co., of Toronto states, his firm actually has to go to the States for a considerable proportion of the pigs required in his business. This must be a great slur on the breeders and feeders in Canada, since we in England look upon the pigs grown and fed in the States as by no means of the first class, and yet we are told, by one who knows, that the really good pigs are scarce in Canada. The natural advantages enjoyed by your home farmers do not seem to be taken advantage of; is this owing to the want of knowledge of the best kind of pig, or is it supineness? From all parts of Europe we are hearing of greater attention being paid to the kind of pig reared, and to the manner of feeding it. The great improvement made in the curing of bacon, and the consequent increase in the demand for it, are two of the main causes, but the low price of cereals and the high price of meat have not been without their influence. On this question of an attempt to improve the pigs of the world, I am able to speak with some confidence, as during the last few years I have shipped large numbers of pigs to every country in Europe except Belgium; even Switzerland has imported some eighty boars and sows from Holywell Manor; to Denmark I sent last year forty-eight breeding pigs, and I have now thirty boars alone ordered for that country, thirteen are on order for Russia, and I have already this season shipped pigs to the States, Buenos Ayres, Russia, Sweden, France, Italy, Germany, Holland, Denmark, Portugal, and I have also some orders for

Spain. This proves two things, that the foreigners are alive to the advantages arising from the possession of the really good stock, and that the Improved Yorkshire is the pig of the period. Some persons have asked what is an Improved Yorkshire. It is a sub variety of the Large White Yorkshire, which has been produced at Holywell Manor, by selecting for a great number of years, the longest, deepest, and widest of the pigs for breeding purposes, and also those with fine bone, plenty of straight silky hair, the most prolific, the quickest growers, and the fastest fatteners. The demand at the present time is for pigs which at the least cost, and in the shortest time, will furnish a long and deep-sided, light fore-quartered, lean carcass of pork, weighing some 160 lbs., and from the experiments made in all the bacon-producing countries in Europe, no pig will fulfil these conditions to anything like the same extent as will the really Improved Yorkshire. Some light-bodied, long-legged, and coarse specimens of the Large White breed have been sent to Germany, and even to Canada; these are not likely to increase the popularity of the Yorkshire breed.

SANDERS SPENCER.

Holywell Manor, St. Ives, Hants, England.

## Veterinary.

For the CANADIAN LIVE STOCK AND FARM JOURNAL.

### Influenza.

"LA GRIPPE" AMONGST HORSES.

By DR. GREENSIDE, Guelph, Ont.

There is considerable analogy between "La Grippe" in the human subject, and Catarrhal Influenza in the horse. During former reported epidemics of Influenza, it is recorded that epizootics have occurred simultaneously in some instances. We have no report of anything of the kind during the recent epidemic, but we are liable to experience such an outbreak in our horses at any time; hence, it will not be out of place to describe the symptoms and treatment of this complaint, in response to the request of "Enquirer."

About the first evidence of illness noticeable, is dullness and depression, with impaired appetite, and cough. If the temperature is taken, it will be found to have risen to 104° or 105°, from 100° to 101° being about normal in the horse. The pulse usually runs up from the normal—thirty-six—to sixty or seventy beats to the minute. The coat becomes rough and dry looking, the ears and legs cooler than natural. Nervous depression is frequently so great that victims stagger in moving. Cracking of the joints is also sometimes noticeable. Very soon there is a discharge from the nose, at first somewhat thin but soon becoming tenacious, of a yellowish white color and profuse in quantity. The water drunk returns through the nostrils, and masticated food is ejected from the mouth as soon as the attempt is made to swallow it, owing to the sore and inflamed condition of the throat. Another well marked symptom is the rapid loss of flesh, which is not to be wondered at, from the amount of fever and the inability to eat.

As a rule, fatal results need not be feared if discretion is used in the management of such patients. It is of the utmost importance to allow the animal to breathe pure air that is moderately warm. The body should be very warmly clad, a pail of cold water kept constantly before the animal and changed as soon as it becomes dirtied by the discharge from the nose.

Two drachm doses of nitrate and chlorate of potash may be dissolved in the drinking water three times a day. No attempt should be made to pour anything down the throat, as great damage may be done. Give the patient anything it will eat, but laxative food, such as grass, roots, boiled grain, mash, etc., are particularly suitable. The skin around the throat should be stimulated with a thin mixture of mustard and water. It is generally ten days or two weeks before the patient shows evidence of much improvement, but as soon as the appetite and ability to swallow are regained, recovery takes place rapidly.

Gentle walking exercise should be given as soon as the animal has strength enough.

It is when animals are not taken off work as soon as any symptoms of the presence of the trouble is apparent, that serious cases are experienced. Or, if proper care of the animal, particularly in the way of attending to his comfort, is not taken, frequently fatal complications arise, as inflammation of the lungs or liver.

## The Farm.

### The Clover Seed Midge.

The growing of clover seed was at one time an important industry with the farmers of several sections in this country, where its production yielded them much revenue. During recent years, however, this industry in some of those localities, indeed in many of them, has well nigh ceased. This is owing to the ravages of an insect known as the clover seed midge (*Cecidomyia leguminicola*), which, for several seasons past, has found a bountiful repast in the heads of the common red clover, with the result that in most instances it has proved valueless as a seed crop.

When the clover seed midge is present the bloom of the clover seems sickly, and the plant as a consequence does not make that vigor of growth even, which it otherwise would.

The clover midge in its perfected state is a two-winged fly, about the size of the wheat midge. This fly deposits its eggs in the tubes of the undeveloped flowers in the young clover heads almost as soon as these begin to form. At first they are not more than the hundredth part of an inch long, being so minute that they can scarcely be seen with the naked eye. As many as fifty of these eggs have sometimes been discovered in a single head of the clover. In about ten days these eggs hatch, and the young larvæ works its way down the tube of the flower to the seed, where it finds the means of its subsistence.

The larvæ, when full grown, are about one-twelfth of an inch long, and are usually of an orange red color. When they mature they leave the clover heads and drop to the ground, but not until they have destroyed the seed in the seed-pod, which, for the time being, furnished them with a home. When they fall to the ground they take refuge beneath the decaying matter on its surface, or burrow themselves a short distance below the surface of the ground, when they enter upon the pupal stage of their existence.

There are two broods a year in this country. The larvæ of the first are full grown early in July, and of the second in September. It is the larvæ of the second brood which do the principal portion of the mischief, as the small red clover does not furnish much seed with the first crop but with the second, which ripens in September.

In this we have one explanation why alsike and mammoth clover usually escape the ravages of this pest. They do not ripen till late in July, and so come to maturity between the time of the first and second broods of the midge.

We are thus also furnished with the key which enables us to elude the ravages of the destroyer when growing small red clover. If we can adopt any plan that will cause the clover seed to ripen before or by September, we will thus be enabled to cheat the midge. This we can accomplish by pasturing the clover until, say, June 10th to 15th, and then allowing it to produce a crop of seed. Both broods of the midge are thus outwitted, since there are no heads furnished which the first may attack, and before the second brood of the pest has had a being the clover seed is ripe. One difficulty, however, is sometimes encountered which renders this plan less valuable than it would otherwise prove.

The dry weather usually encountered in August is adverse to the maturing of the seed, hence a crop that is less valuable is oftentimes harvested than if the same could be allowed to ripen during the first half of September. Other remedies have been suggested, but no one of them is of much practical value. That

which recommends the cessation of the growing of the clover plant for a term of years with the view of starving out the midge is the most effective could it be carried out, but it is entirely impracticable, for we cannot do without clover for a single year though we do not grow it for the seed at all. No other forage crop will take its place either for the production of pasture or fodder. We want it to draw down ammonia from the atmosphere and to draw up nitrogen from the subsoil for the enrichment of the cultivatable portions; we want it to fill the soil with its roots and rootlets which, both in life and death, improve it mechanically and chemically, and we want it because it has no equal amongst the grasses for the production of milk.

When the larvæ of the midge is found in purchased seed it has been recommended that the same be heated to a degree which will not be sufficient to destroy the germinating power of the seed, but which will, at the same time, kill the insect. This plan, however, will not be adopted by one farmer out of a thousand because of the labor and skill which it involves, and is, therefore, practically of but little value.



A Bag Holder.

A correspondent sends the Philadelphia Farm and Fireside a sketch of a bag holder that has much to commend it. A is the stud or side of granary; B is a cleat with a level on the top nailed to the stud; C is the holder, with tenpenny wire nails to hold the bag. This cleat is the same as the one nailed on the stud. When in use this cleat fits on the one on the stud. The holder can be used anywhere and the organizer of the idea says he has five cleats in his mill and only one bag board.

### Salt for the Wire Worm in Corn.

As far as the corn crop is concerned, there is no insect so effective in its ravages upon it as the common wire worm (*Agriotes lineatus*), and especially are its ravages severe when the commendable practice is to follow sod with corn. Though the loss from wire worms is greater when sown after sod, yet the fact that the corn crop yields heaviest on land rich in vegetable matter warrants the adoption of the practice. The season just past is one that has been exceptionally favorable for this pest, owing to the unusually open and mild winter, and it is altogether likely that it will seriously affect the corn in most districts. The first indication of the attacks of this insect will be noticed in the young corn just as it gets nicely above the ground. The leaves assume a yellowish hue, and after a time wither up completely. If the corn plot is observed to be yellow in spots, the trouble should at once be investigated, by digging up a few specimens that are just beginning to tinge, and, if the trouble is due to this pest, a small worm hard as wire, of an orange yellow color, with six legs on the fore part of the body, will be attached to the roots. When it has finished its work, indicated by the uniform yellow color of the young plant, the blade may be easily pulled up, as the worm has completely separated the stem from the roots. In respect to remedies, the most satisfactory that has yet been tried

is top dressing with salt and nitrate of soda as soon as the attacks are observed. The salt checks the attacks of the worm, while the nitrate of soda pushes forward the young corn. Other manures such as rich farmyard manure, or better liquid manure, would serve the purpose of the nitrate of soda, and be more easily obtainable. The salt may be applied in quantities varying from 300 to 500 lbs. per acre, according to the nature of the soil and the severity of the attacks. The value of salt as a top dressing for pastures is not appreciated as it should be, as it not only improves the latter for feeding, making them finer it is said, but applied as heavily as from 500 to 600 lbs., it is effectual, as a rule, in ridding the soil of the wire worm. Even in England, where one would naturally conclude they had little use for salt, owing to their proximity to the sea, this fertilizer is used extensively on grass lands and mangels, as well as to lessen the ravages of the wire worm.

For the CANADIAN LIVE STOCK AND FARM JOURNAL

### Willows as Live Fence Posts.

Fences seem to be necessary, and, if so, are an expensive necessity, constituting one of the farmer's heaviest taxes. Poor, rickety fences, will soon spoil a good stock, and roving cattle soon disturb the quiet of a neighborhood, and is what no farmer can afford to have, as they are useless for the purpose designed and propagators of weeds, bushes, and briars. Fencing material in a wooded country is always plenty enough, so it is where stones abound, and, in order to compete with the world as producers, we must do our work principally with horses and machinery, and for this reason our fields must be rid of stone, and in a good wall they become useful and ornamental, as well as a most effective barrier against all kinds of stock except sheep. It requires good taste to place fences just where they add most to the good looks of the farm, as well as serving the farmer's best purposes as a fence. I believe the farmer should try to have fewer and better fences; many farms are sadly disfigured by too many fences. Road fences are frequently too near the road to permit that cultivation of improvement which adds so much to the looks and value of the farm, and is the principal cause of snow blockades.

Fences, as I said in my first sentence, are an expensive necessity, and any material or method whereby we can reduce their present cost, and add to their effectiveness as a fence by reducing their yearly expenses for repairs, should receive favor. In fact, if we can at once have a substantial, cheap, ornamental and "everlasting" fence, it is what we certainly want. Stone, where stone abounds, should be used for our permanent fences, but where they do not and cedars are getting scarce or even likely to become scarce, they should be kept for the fences which will be required to be moved occasionally, but in other cases for line, road, and where fences will be permanently required we believe nothing surpasses, for cheapness, looks and efficacy combined, the "grey willow" for a living post. They will live in all sorts of soil, never sprout from below the soil to encumber the ground, and only a few willow trees will produce hundreds of posts. The hoar never affects them as they do the locust and some others, and they seem to have no objections to our winters. As the limbs are always straight, they can all be utilized. The limbs for posts should be cut in the spring in lengths of 6½ feet, and may be used as small as 2½ inches in diameter, and then, with an iron bar as the only tool necessary, make holes six feet apart and two feet deep, and stick these limbs in the ground, large end downwards, and by fall they are there for evermore, the roots preventing the frost or even an ox from heaving them out. I place the posts near together, as the cost in material and labor is merely nothing, and the wires when put on last better, as the nearer together the less contraction by cold, consequently less breakage. A plain, smooth wire always being put at the bottom where sheep are kept, to save their wool, and the top a wood strip to be visible, especially where horses are kept.

TRUE PROGRESS.

### Is Rape Hard on Land.

FROM THE CANADIAN LIVE STOCK AND FARM JOURNAL:

SIR.—I have heard some people say that rape is hard on land. Please mention whether it is or not. I have known it grown on summer-fallows, but never for pasture in this part of the country.  
GEORGE CLEVELAND

Rape would be hard on land if it were cut and removed from the field, just in the same sense that turnips are hard on land. But when it is pastured on the ground it does not tend to impoverish the soil. It is usually fed off with sheep, and the droppings fall on the same land on which the rape grew. Moreover, droppings of sheep enrich land very effectively when they fall on soft ground, as, owing to the treading of the sheep, they are considerably incorporated with the land. This method of farming will not make land poor. It should be remembered, however, that rape requires rather good land to grow it well.

### Corn for Ensilage.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—Will you kindly tell me which is the best corn for ensilage purposes, and oblige,  
J. KILBURN.

York Co., N. B.

During the past season, at the Ontario Agricultural College, Guelph, nearly sixty varieties were grown side by side, with the result that the following are recommended where the growing season does not exceed 100 days: Pearce's Prolific, King Philip Flint, Pride of the North No. 23 and Longfellow. Where the season is longer, or where it is more favorable, the following varieties are spoken of as worthy of commendation: Wisconsin White Flint, Wisconsin Yellow Dent, Sibley's Pride of the North, Wisconsin White Dent, Angel of Midnight, Golden Dew Drop, Canada Yellow, Horse Tooth and others. In sections of the province where larger varieties of corn will mature—enough to allow the corn to grow to the glazing or roasting period—the following varieties, it is stated, may be expected to return larger yields than those already mentioned: Mammoth Southern Sweet, Red Cob Ensilage, Giant Prolific Sweet Ensilage, Sharp Tooth, Hickory King, Parish White Dent and others.

### Corn Cultivation.

I saw in the April number of JOURNAL, just to hand, instructions as to growing and preparing corn for ensilage, in which the writer says, "harrow when 2 in. above ground and continue till 6 in. above, and then cultivate between drills." We have not grown much corn here and are novices in its cultivation. It seems to me that such harrowing would take it out by the roots, and also break down the stalks, and in that way destroy many plants. If this is not so, would you kindly let me and others know through your JOURNAL. In sowing corn, would you drill up as you would for turnips, or sow on a flat surface?  
Yours truly,  
J. D. SRAMAN.

Charlottetown, P. E. I.

Corn should, by all means, be sown on a flat surface, and should not even be drilled up in cultivating it, as is sometimes done, as such drilling has a tendency to shed the rain from the roots. Harrowing it, as referred to in the above letter, will answer a most excellent purpose and will not be followed by any injurious results worth speaking of. It is possible that now and then a stalk may be torn out, and one here and there broken, but the whole number thus injured will be relatively very small, and this will hold true whether the corn is sown broadcast or in drills. It is vastly better, however, all things considered, to sow it in drills.

### Ontario Agricultural College Course.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

(1) I have six acres of land which I wish to sow to roots. The land is heavy clay, and not very rich nor very dirty. It is level with the exception of a few gravel knolls. I ploughed part of it deep last fall, and would have ploughed the remainder had I time. It was wheat stubble. I have not had very good crops of turnips for the last few years, and I was thinking of sowing it to the following crops: Potatoes, turnips, mangel wurtzel, and carrots. What portion of said land would you advise to sow to each kind, and how much would you sow to acre?

(2) I have been thinking I would take a three months' course at the Ontario Agricultural College next winter, commencing Jan. 1st and ending the last of March. I would like very much to know how much it would cost me including board and tuition fee, I should like to take a longer course but cannot afford it.  
SUBSCRIBER

Wilfrid P.O., Ont.

(1) The amount of land to sow to the different crops mentioned should be determined largely by the use that is to be made of the crops. Ordinarily, farmers only grow enough of carrots to feed their horses once a day in winter, and, in most instances, but sufficient potatoes for home use. From the description of the

land it would seem more suitable for mangels than for turnips, and these should, therefore, be principally grown upon it. The part ploughed in the fall should be put in with mangels as they should always go in early.

(2) The cost of tuition at the Ontario Agricultural College for three months would be the same as for a year, that is \$20. All students who do not take a regular course would require to board outside. Board costs \$3 per week, which does not include washing, and students who board out are not required to work. Any students who can only attend for a year, or a part of a year, should select the subjects which they care most to learn about, and concentrate their attention on these. They have the option of doing this if they choose, and so are enabled to take the purely agricultural lectures in both the first and second years.

### Wisconsin Farmers' Institute Bulletin.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—I send you by mail Bulletin No. 3, Wisconsin Farmers' Institute. The edition consists of 31,000 copies, and although the same number was issued of Nos. 1 and 2, they are nearly exhausted. I shall take pleasure in sending any of your readers No. 3, if they will send me their name and post-office with 10 cents to pay postage.

We have held sixty-four two-day institutes this winter. They were well attended, and I know they are enlarging the horizon of our farmers. I am more and more convinced that the most practical and successful method of reaching the farmer is through the Farmers' Institute and meetings of like character. The three hundred two days' meetings held by the Wisconsin Farmers' Institutes have done more to reach the great mass of unreached farmers in the State in the past four years than all the other agencies of society combined. These meetings have aroused and implanted a hunger for better intelligence in thousands where but little hope existed. The farmer can be reached only by the practical, successful ways and methods of a brother farmer in whom he has confidence.

The professional man with fine spun theories, who will talk an hour about nothing, will let no daylight into the intricate problems that the average farmer has to solve, that of less price and less productive power of his land; but it is the successful farmer who can say "I have done it," that will liberate the farmer and make him an intelligent business man. The agricultural paper, the agricultural book, the experimental station, and the Farmers' Institutes are for the farmers who read, study and think. Success to them. Yours very truly,  
W. H. MORRISON.

Madison, Wis.

For the interesting work we have been favored with we tender our heartiest thanks to Mr. Morrison and his co-workers, and for the exceedingly kind offer he makes our readers we feel sure that we may take upon ourselves the privilege of as heartily thanking him on their behalf. Under the careful guidance and intelligent management of Mr. Morrison, the Institutes of Wisconsin, as mediums for reaching the farmers, and inducing them to adopt better practices, have no equal on this or any other continent to our knowledge. Such enthusiasm and energy have they under intelligent control that even we, distant though we are, have been sharers more or less in the benefits of their counsels.

The silo, for some time the hazy vision of a few enthusiasts, through the agency of these Institutes was brought within the practical grasp of every farmer, and proven to be an economical factor of inestimable worth, and so loud was the pean sung in its favor that many of our farmers caught the strain as well as the idea, and never yet have we heard one regret its adoption. In respect to the practice of the dairy, garden, farm, and every other phase of the farmer's vocation, they have been no less influential, and the one feature that stands out strongly in the management to account for this rapid progress is the fact that they did not seek, as Mr. Morrison aptly put it, the services of "the professional man with fine spun theories, who will talk an hour about nothing."

We have heard officials of our own Institutes bewail the apathy shown by our farmers, and there is no doubt, in some cases, ample reason for such; but if our secretaries of the different Institutes will accept a word of advice from an earnest friend, they will not delay one moment in availing themselves of Mr. Morrison's kindness: and if, after carefully reading the short, pithy, practical and thoughtful papers contained in this bulletin, they do not see the cause of the unbounded success of Wisconsin Institutes, and the moderate success of some of our own, then our insight into institute work has availed us nought.—Ed.

JOHN McLARKIN, of Clearville, Ont., writes: I have been taking your journal since first started and think it is a valuable paper for the farmer.

## Young Stockman's Department.

### Our Prize Essays.

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

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

The conditions to be observed by competitors are:

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

Essays for June Competition:

(1) The Rearing, Feeding and Management of Steers for Market.

(2) Selection of Breeding Pigs.

Essays for July competition:

(1) Has the Dog a place on the Farm.

(2) The Growing of Oats and their value for Feeding Purposes.

### Our Barley Competition.

We are pleased to state that the scheme we started underway last month in respect to barley growing, is meeting with hearty encouragement. The names are coming in fast, and to induce others to join in the contest, we publish a list of the competitors received up to date.

#### The Barley Bulletin of the Dominion Government.

The bulletin on barley lately issued by Prof. Saunders, Director of the Dominion Experimental Farm, will mark, we venture to say, an epoch in the agricultural history of Canada. What we are going to do and here describe has been incited by the statements made in that excellent document.

**The Failure of the Importance of the Canadian Barley Crop.**—A few years ago barley was one of the most profitable crops the Canadian farmer could produce. His grain was of the best. There was a great demand for it in the United States. The American farmer could not produce so good a grain; nor could he produce enough for his market. The consequence was that Canadian barley was grown for profitable sale in the American market. Now, however, the United States farmer has learned to produce a good grain. And the demand for barley there is greatly lessened owing to the use of corn, rice, glucose, and other substitutes for it. The result is that barley growing has become unprofitable to the Canadian farmer.

**Two-rowed Barley.**—All the above applies to "six-rowed, barley, the kind hitherto principally grown in Canada and used in the United States. In England the barley used is two-rowed; but two-rowed barley has been but little cultivated in Canada. The price of two-rowed barley in England is such that if a good two-rowed barley were grown in Canada, in sufficient quantities to permit of its being transported to England at reasonable cost, its price in Canada would range from 86 to 98 cents per bushel of 56 pounds. Every Canadian farmer will, therefore, see the importance of trying to raise a two-rowed barley that will satisfy the English requirements.

**What Two-rowed Barley Should Be.**—Two-rowed barley should be plump in the kernel, and light in the husk; and it should not be cut until the grain is fully ripe. This latter condition is of great importance. Again, the grain should be perfectly whole, and it should contain no admixture of the six-rowed sort. Moreover, it should not weigh less than from 54 to 56 pounds per measured bushel.

**Best Varieties.**—Prof. Saunders has been at great pains to get samples of the best varieties of two-rowed barley, and these he has had tested in various parts of the Dominion. From all the different varieties we have selected **The Beardless**, as the one that, in our opinion, promises the best returns to the Canadian grower. The Beardless variety is bearded like other sorts, but it often sheds its beard when fully ripe; and it drops its beard so easily when mature that it is more easily threshed and cleaned than other sorts. We may add that Prof. Saunders also thinks this Beardless variety to be one of the very best sorts.

**Superiority of the Beardless Variety.**—Besides these points of superiority, the Beardless variety returns a good yield per acre (50½ bushels at the Experimental Farm at Ottawa); and its weight per bushel is also good (56 pounds at the Experimental Farm at Nappan, N.S.).

**What We Propose to Do.**—Through the courtesy of the Hon. Mr. Carling, Minister of Agriculture, of Ottawa, and Prof. Saunders, of the Dominion Experimental Farm, we are enabled to offer to every young subscriber of THE LIVE STOCK JOURNAL who desires to enter our competition, a 3-pound bag of pure, clean two-rowed barley of the Beardless variety. Each

bag will contain exactly 3 pounds, no more, no less. It will be sent, post-paid, and free of all charges, to any applicant who will send us his name, on the understanding that the applicant shall comply with the conditions of the competition.

**What the Competition will be In.**—The competition will be to see which of our young subscribers shall be successful in producing the greatest weight of pure, clean grain from his 3-pound bag of seed. The grain must be sown by himself, cultivated by himself, harvested by himself, and threshed and cleaned by himself. Then it must be weighed, and its weight and purity and the integrity of the whole proceeding must be attested by disinterested witnesses, at 1 a pound of the grain harvested must be sent to us, that the awards may be justly made.

**What the Prizes will be.**—We shall award four prizes, of the value of \$20.00, \$15.00, \$12.00, and \$4.50, respectively, for the first four best results. These prizes will not be in money, but will be chosen rather with a view to permanent value and utility, and their suitability to keep in remembrance an achievement of more than ordinary interest. These prizes will be described in subsequent issues of THE LIVE STOCK JOURNAL. It is probable that we shall be able to announce new supplementary prizes.

**Other Conditions of the Competition.**—Intending competitors must be subscribers (either in their own name or that of their parents or guardians) of THE LIVE STOCK JOURNAL. They must not be more than 20 years of age on 1st of September next. They should send in their names as competitors as soon as possible. They will then receive their bag of seed, and a blank form of report. In this report they must enter such particulars regarding time of sowing, method of sowing, methods of cultivation and manuring, time and manner of harvesting, and weight of grain obtained, as we shall ask them. The attestation of the witnesses as to weighing, etc., must be made on this report also. Then this report must be sent to us not later than the 1st of September. Each competitor will also be expected, at the close of the season, to fill in a blank form which will be supplied by the Department of Agriculture, and to send a pound of his grain to Ottawa, as a sample of what his method of cultivation has been able to effect. The successful competitors will also be required to send us a pound or two of their grain, for exhibition at the principal fall agricultural exhibitions.

**What the Competition will Effect.**—This competition will enable every competitor to obtain, at no cost to himself, a sample of the most valuable variety of what is going, in all probability, to be in the future one of the leading grain crops of Canada. At the end of this season he will have, if fairly successful, something like two bushels of seed grain. Sowing this next year, he will have at the close of the season say from 25 to 40 bushels of seed (or perhaps more) available for 1892. He will thus have, in addition to a great deal of most valuable experience, a sufficient quantity of seed to enable him to enter upon the production of two-rowed barley as a profitable pursuit.

**Conclusion.**—Now, boys and young men, send on your names at once. Let us have a grand contest. Should the interest taken in this competition be what it should be, we will do all in our power to make it useful to the country at large, and especially useful and profitable to those actively engaged in it. We trust to be able to add to our prize list considerably. Remember that the question whether two-rowed barley can be profitably grown in Canada is as yet undecided. Many people think it can. Each farmer will have to find out for himself, that is so far as his own farm is concerned. He must also learn how to sow it, how to manure it, how to cultivate it, how to save and cure it. He can learn this only by practical experience. If you engage in this competition, and learn all this, and if it should prove that two-rowed barley is a good crop for Canadian farmers to produce, then you will be one or two years ahead of all those who do not begin to get their experience this year. The appended list gives those that have already entered the competition. We are pleased to note that all parts of Canada are represented. We would be glad to have a number of our young stockmen resident in the various provinces enter into the contest, for by their doing so, the results may be made far more valuable.

During the past month we have received the names of the following competitors additional to those published in the April issue:

D. C. Smith, Duart, Ont. D. Crawford, Canboro, Ont. D. S. Ross, Balmoral Mills, N. S. A. J. Hewson, Allanburgh, Ont. Norman Bowden, South Cayuga, Ont. George Cooper, Ormstown, Que. N. Cates, Napinka, Man. Wm. H. Stevenson, Ancaster, Ont. Arthur Meighen, St. Mary's, Ont. J. R. Rankin, Hamiota, Man. J. C. Walker, Brandon, Man. C. C. Cooke, Pheasant Forks, N. W. T. A. J. Webster, Pheasant Forks, N. W. T. H. C. Snow, Pheasant Forks, N. W. T. Eddie R. Lewis, Burford, Ont. John Brooks, Adelaide, Ont. John Robertson, Adelaide, Ont. A. H. Sellar, Sourisford, Man. E. McBride, Bradford, Ont. L. G. Briuow, Rob Roy, Ont. W. Hubbard, Burton, N. B. K. Killins, Canboro, Ont. J. Gilroy, Lynn, Ont. John A. Steele, Trenton, Ont. Levi Pike, Locust Hill, Ont. A. E. Dingle, Dundas, Ont. Robert Anderson, Thornbury, Ont. W. W. Fisher, Benmiller, Ont. F. W.

Rilance, Beaverton, Ont. J. E. A. Jardine, Prince Albert, N. W. T. Willie Clarkson, Malton, Ont. A. E. Cooney, Laurel, Ont. Chas. Carruthers, Colborne, Ont. Allan McKinnon, Port Elgin, Ont. Alex. Elliott, Woodbridge, Ont. Frank Riely, Selby, Ont. Wm. Speirs, New Floss, Ont. Wm. R. Armstrong, Locust Hill, Ont. Norris Merritt, Smithville, Ont. J. R. McKenzie, Churchhill, Ont. John Coultres, Wingham, Ont. Thomas Allan, Churchhill, Ont. George Langdon, Petherton, Ont. G. H. Goode, Flesherton, Ont. T. H. Russell, Exeter, Ont. J. B. Lawrie, Mongolia, Ont. Wm. Miller, Markham, Ont. Edgar Foster, Clarksburg, Ont. J. G. Hastie, Drumore, Ont. John Atkinson, Woodburn, Ont. Clinton Davis, Kleinburg, Ont. Wm. J. Dynes, Granger, Ont. Daniel Ballard, Woodford, Ont. A. H. Scarlett, Florence, Ont. Charles Eastman, Warwick West, Ont. John James Waldon, Lindsay, Ont. W. J. Holmes, Meaford, Ont. Wm. L. Cabute, Knatchbull, Ont. A. C. Quickfall, Bridgeport, Ont. John Mitchell, Brownsville, Ont. Joseph Adams, Columbus, Ont. Henry Bird, Mandamin, Ont. Simon J. Fraser, Bradford, Ont. Willie Raison, Adelaide, Ont. J. W. Carr, Hopeville, Ont. George S. McKee, Belmore, Ont. James M. Dickson, Atwood, Ont. S. R. Hewson, Allanburgh, Ont. Wesley Parkinson, Elmville, Ont. H. G. Webster, Florence, Ont. John Simpson, Moffatt, Ont. A. W. Dewar, Kertch, Ont. Thomas Stewart, Upper Kent, N. B. Edson W. Sanders, Compton, Que. Alfred Irvine, Holstein, Ont. Herbert Irvine, Holstein, Ont. James M. Carruthers, Ormstown, Que. Andrew Stewart, Gillic's Hill, Ont. Bruce Dewar, Kertch, Ont. P. H. M. Moore, Moore's Station, Que. H. D. Moore, Moore's Station, Que. Charles George, Adelaide, Ont. F. A. Clark, Aytton, Ont. A. H. Ledger, Burford, Ont. Ralph R. Rudd, Eden Mills, Ont. Wm. E. McFarlane, Strabane, Ont. Ernest O. Gowan, Springvale, Ont. Eben W. Gowan, Springvale, Ont. E. E. Slack, Hagersville, Ont. Benjamin Coutts, Vickers, Ont. Walker J. Lamb, Walkerton, Ont. Wm. Lockie, Zephyr, Ont. Peter Gardiner, Leadburg, Ont. W. J. Kennedy, Vernon, Ont. Lee Leaman, Charlottetown, P. E. I. Herbert A. Edwards, Watford, Ont. Thos. E. Caskey, Tiverton, Ont. James Lamont, Caledon, Ont. Harry Wallace, Waterloo, Ont. C. Newton, Pheasant Forks, N. W. T. Claude Snider, Attercliffe, Ont. T. A. Crawford, Bethel, Ont. Alf. E. Tindale, Castleburg, Ont. T. B. Keeling, Brunner, Ont. Wm. Flock, Sinclairville, Ont. G. M. Shaw, Woodburn, Ont. Thomas Chisholm, Galt, Ont. H. K. McKenzie, Lucknow, Ont. R. J. Baldwin, Canboro, Ont. J. T. Baird, Guilds, Kent Co., Ont. T. P. Everall, Fall Ranche, Chilliwhack, B. C. W. Brydon, Neepawa, Man. Willie H. Mitchell, Lennoxville, Que.

### Feeding Young Pigs After Weaning.

Before the young pigs are weaned, they will be able to eat nicely where they have been allowed access to food beyond the reach of the sow. If a little skim milk is put in a low trough thus situated, the young pigs will learn to drink it before they are two weeks old. It should not be allowed to remain long in the trough at a time or it will sour. After a few days some wheat middlings may be stirred in with the milk. Where this is not at hand oatmeal will answer, but is costly, and ground oats will also answer, but not so well, as they are too coarse.

Where the pigs cannot be thus fed apart from the sow, if the trough in which she feeds is low, or if planks are laid in front of it, the young pig will soon learn to eat with the dam, but the food in such instances is not likely to be quite adapted to their young stomachs.

They may be weaned at six weeks, but are all the better to remain with their dam until eight weeks old, providing she is well fed, and when weaned, they should at first be fed four or five times a day, of the same ration given them before weaning, that is, wheat middlings and skim milk or buttermilk, or when these are scarce, swill from the house.

Various other kinds of meal may now be added alone or in combination, taking care not to make the fat-producing foods too prominent in the mixture. These are such as peas and corn. The object should be to make the young pigs grow rapidly without fattening them.

The following mixture will certainly answer well if milk or house swill, or even water, is fed along with it, viz., equal parts of ground peas, ground oats, ground barley, and wheat middlings. As they become older, the proportion of the peas may be increased until it is doubled. The meal should be stirred in the liquid before being fed.

Now boys, try your hand at raising young pigs. Don't be content to get the "runts" of the herd to experiment with, for runts never pay well, no matter how skillfully managed. If you could weigh your pigs once a month, or oftener, it would add much to the interest of your work. They should gain quite a bit more than a pound a day for the first few months, and when six months old should weigh about 180 to 200 lbs.

I must not forget to mention that you must be particular to feed them only what they will eat up clean, and try and feed them as regular as clock-work.

I will probably tell you how to manage them when grass comes plentifully about the first of June.



## The Feeding, Care, and Management of Working Farm Horses.

[PRIZE ESSAY.]

By FRANCIS R. DOBSON, Schomberg P.O., Ont.

Farm horses should be fed at all times liberally with good hay; two-thirds timothy, one-third clover is best. They should have cut sheaf oats with meal on it twice per day, with one gallon of oats at each feeding. A few carrots once per day is good for them, and it gives them an appetite. They should be watered before being fed three times per day, and well cleaned every morning; and in the evening after working their legs should be well rubbed and their feet cleaned out, so that there will be no mud or stones in them. Their shoes should be removed at least once per month. Care should be taken that their shoulders do not get sore, and to prevent this, their collars should be rubbed with a smooth stick and cleaned before putting them on. Hoof ointment is good for such sores on horses. Horses when working steady should have their mangers filled with hay at night, and in the morning they should be given all the water they will drink. Then give one gallon or over of oats. Cleaned and harnessed after this they are ready for work as soon as their oats are eat at noon. Water them before putting them in as they are mostly too thirsty to eat if not watered. For dinner, give half a bushel of cut sheaf oats with one gallon of meal on it, then after the teamster has had his dinner give each horse two heaped gallons of oats. One hour and a half should do them at noon. At night, water them before putting them in and feed same as at noon. Take off their harness, rub them down well and clean out their feet, fill up their manger with good hay, and give them plenty of clean dry straw to lie down on. The bedding should be all thrown out in the morning and the floor scraped out clean. A good meal chop for horses is made by chopping ten bushels of oats, five bushels of barley, five bushels of peas, and five hundred pounds of bran mixed. One gallon is enough for each horse with the cut feed. They should have exercise when not working.

### Thoughts From the Boys for the Boys.

ARTHUR HUNSBERGER, of Tintum P. O., Ont., writes us that he was very much pleased with the prize we sent him, and also encloses another excellent essay on "Farm Horses." The essay is written in a very neat hand, and the thoughts are, as a rule, well expressed. He says, writing of the feeding: "Feed them cut hay, chopped oats, and bran, made into a mash, in morning and evening. Give them sweet hay at noon and then oats and bran mixed. It would not be wise to give rules as to the amount of feed they should have, for some horses require more feed than others. Do not pack their hay in a rack, but put it in a box or manger, then they can eat what they choose and the rest can be given to the cattle. . . Always give them plenty of salt."

WILLIAM H. HENDERSON, of Rockton, Ont., aged fourteen, sends us a capital essay for one so young in years. Not only does it contain much sound sense, but it is clearly written in a neat hand. He touches upon a too common practice with frolicsome and thoughtless boys, and his advice is certainly of the best. He says: "Never tease your horses while they are eating, or at any other time, as it makes them angry, and it is very apt to make them kick or bite. When you are working with horses, do not yell at them and jerk them around with the lines, and if they do not do just as you want them, do not swear at them or hit them a cut with the whip. This is advice that every boy should follow, and it certainly shows that our essayist has a kind heart and is careful not to pamper the animals under his care, and this is one of the most admirable, as well as profitable, features of a good stockman."

ARTHUR E. SELLAR, of Sounsford P. O., Ont., writes on Farm Horses. The essay shows that the writer knows whereof he writes. He says: "In feeding horses, the quantity of grain given at a feed may be regulated according to the amount and character of the work being done, but they ought, at any time, to get at least from 5 to 6 lbs. of oats, whole or chopped (the latter preferred), at a feed, as they will then derive all the benefit from the grain, and they should get no more hay at a time than they will eat up clean; also, I think it best to give them their water before feeding."

HENRY HOGARTH, of Brooklyn, Ont., forwards a thoughtful essay on the same subject. The essay is bristling with hard

facts, showing the writer to be well acquainted with the management of horses. "During the winter when they are not working, they should be given good hay and a few oats. Some people prefer to feed them cut feed, with a little meal and bran. A few turnips or carrots are good to keep them healthy, with plenty of good water twice a day and a run out once a day. When spring comes on they should be fed heavier, and to harden them up for spring work they should be put to work gradually, to prevent them from being troubled with sore shoulders and failing in condition. . . A horse will do just as much work with moderate, careful feeding as it will if fed too heavy, and be less liable to be sick."

ROBERT HENDERSON, of Rockton P. O., Ont., in an essay of merit brings forward several points that were overlooked by others. He writes: "The harness should be kept soft and clean, and on cold mornings, when the bit is frosty, it should be steamed before putting it in the horse's mouth, as it will otherwise stick to their tongues and pull off pieces of skin, which causes great pain." Treating of watering, we must differ slightly from our essayist. He says: "They should never be watered or fed any kind of grain while warm, as they are apt to get foundered." This is right in a certain sense, but is also wrong in another. It is a bad practice to give a horse that is warm a pailful of cold water, as it will undoubtedly cause foundering, but at the same time, a mouthful or so will quench their thirst for the time being and not in the least harm them.

WESLEY M. FISHER, of Benmiller, Ont., writing on Farmers' horses, dresses his ideas in clear language. He writes: "Feed the working horses, each morning, three-fourths of a gallon of chopped oats and half a gallon of bran, or else one and a fourth gallons of chopped oats and all the clover hay they will eat up clean. At noon feed one gallon of whole oats. Before feeding this, see that they are watered, and give them their hay before they receive their oats. For the evening meal feed to each horse one gallon of boiled oats with a little bran mixed. Do not neglect to supply your horses with salt."

## The Dairy.

### Sweet Cream Butter.

Dairymen, more than any other class of workers, show the least deference to opinions of their own fellows, unless such are built on rock-bottom facts, and conversely they show most respect for opinions that coincide with their practice. In conformance with the first mentioned thought, all along the line of progress in the dairy industry we find broken idols that were once worshipped with fervent zeal. The dairy department of the New York Experiment Station, as a result of some of their experiments, once more startle rudely the upholders of the sour cream theory. They state that in every trial there was less casein in the butter made from sweet cream, and the butter was easier freed from milk and foreign matter. The advocate of the sour cream method held this as his best argument. The conclusions they arrive at are: 1. Sweet cream should be churned at a considerable lower temperature than acid cream. 2. When the temperature is properly adjusted, the fat is more fully recovered in churning sweet cream than in churning sour cream. 3. The butter is easier freed from milk and requires less working. 4. The flavour is genuine butter flavour, dependent more upon food and less upon uncontrollable changes in acidifying the cream. They state that the flavour of butter made by churning sweet cream is altogether different from that obtained from sour cream, but they advance the opinion that it is only a matter of education to the taste. These results will at least set buttermakers thinking in regard to this matter. If the attention and work necessary to ripen cream is unnecessary, the sooner it is known the better. A correspondent of *Hoard's Dairymen* states that last January he tried six experiments in this direction, three with ripened cream and three with cream perfectly sweet. He weighed the milk carefully that was set for churning on each trial, and the result was that in every case he obtained as much butter from the

sweet cream as from the ripened. In his own words: "In each trial, I put into the cream before churning half a pound of Liverpool salt to the amount of cream that would make twelve pounds of butter. The salt has a chemical effect upon the cream that causes it to liberate the butter as perfectly as any process of churning will. Cream that is sweet and salted in the manner above stated will churn as easily as when acidified. To get the best result from the churn, the buttermilk should not be above 60° Fahr. when the churning is done. Will the sweet cream butter keep? Yes, it will keep long enough in the winter time to be all eaten up in this market and command the highest market price. Then why go to the trouble of souring cream, if one can get as much butter and can sell all he can make at the highest market price by churning sweet cream? I have a dairy of sixty cows, make butter six months and cheese six months. Never sold butter for less than twenty-five cents per pound. I have been in the business for twenty years."

### Protecting our Cheese.

It would be indeed wonderful if such a reputable article of commerce as Canadian cheese, which is so highly thought of in the world's markets, should not be imitated or labelled in some form or other. It appears that for some time back considerable American cheese has been shipped through Canada to the British markets, and has there been disposed of, profiting by the good name that all cheese coming from Canada has made for itself. To put a stop to this shameful practice, as well as to secure the co-operation of the government in discouraging the production of "filled" cheese (which is worse than skim milk cheese, being made from skim milk, with the abstracted fat of the cream replaced by other fats), a deputation consisting of representative men from the different dairy associations of Ontario, waited upon the government. Prof. Robertson accompanied the deputation, and with him the delegation left the task of presenting a memorandum for the consideration of the Minister and government. Through the *Ingersoll Chronicle* we learn that the objects sought by the deputation are briefly as follows:

"That all cheese made in Canada from unadulterated milk, and containing not less than 3 per cent. of butter fat, shall be marked both upon the cheese and upon the packages, with a standard brand to be adopted by the Government. The use of this brand shall be optional with the manufacturer, but its use upon cheese made from milk, where skimming can be proven sufficient to impoverish the article, or upon cheese not made in Canada, shall be a punishable offence; and second, that all cheese made in the United States, and shipped in bond through Canada and from Canadian ports, shall be branded 'United States product in bond,' so as to distinguish them, in landing, from Canadian goods. Other matters of considerable importance to the dairymen of this country were advanced by the deputation, such as having registered numbers for all factories; also giving power to the provincial inspectors to prosecute where fraud is detected, but it is scarcely likely that these will be acted upon this session."

When such an important industry as this is involved, prompt and decisive action is called for, and this no doubt the government will recognize and act upon.

### Butter for the British Market.

The Canadian agent at Bristol, Mr. J. W. Down, comments in an interesting way as follows, upon the status of our butter in the British markets, and also throws out some hints which will no doubt be appreciated:

Butter is improving, and, with care, shippers forwarding good quality only will soon find a ready and remunerative market. There is always a good demand at fair to high prices for choice butter, while nobody wants poor butter at any price, except in very few exceptional instances. Now there is not much probability of the average quality of Canadian butter being very materially improved until the present mode of manufacture in private dairies, and hauling through

stores, is abandoned, and the creamery system generally adopted. The advantages of the creamery system are to secure the manufacture of butter under the best conditions, thus insuring high quality as well as uniformity of quality. Another great advantage from the creamery system would be in the mode of handling. The butter would be stored at the factory as fast as turned out, for no creamery would be without good storage facilities. The handling of butter would thus pass out of the hands of the storekeeper, who, as a rule, has not the facilities for properly storing the article. Indeed the mode of handling, with poor storage facilities, is, to a considerable extent, accountable for the large quantity of poor butter. Very good butter, after storage for a few weeks, under the ordinary conditions as are usually available at country stores, would be certain to come out deteriorated in quality. To hold butter at all for any length of time, even with the best facilities, means a deterioration in value, for the fresher the butter the better it is. It is not an article that improves with age. But when the facilities for holding are poor, the deterioration in quality is very rapid. The quality and mode of packing butter in Manitoba has greatly improved during recent years. Formerly every manner of vessel was used for packing butter, pails being frequently used instead of the regular firkins. Country dealers are also learning that the earlier butter can be marketed the better it is for the quality of the article. There is, however, plenty of room for further improvement. Of course there are difficulties in the way of a general adoption of the factory mode of manufacturing butter in a country with so sparse a population as Manitoba. The creamery industry, however, should be encouraged wherever practicable, in the hope of improving the butter trade of the country.

There is vast room for improvement in the quality of a large portion of the butter reaching our markets. While looking to the creamery system as an important factor in the revolution of the butter industry, yet the fact should not be lost sight of that it is also necessary to educate farmers' wives in the art of making good butter in their private dairies. It will be a long time before creamery butter will supersede the present home-made article. It is, therefore, necessary to endeavor to induce private makers to turn out good butter. The matter is a difficult one to handle, no doubt, but the importance of the question is such that it is worth while making an effort to attain the desired end.

## Poultry.

### A Prize Gobbler.

An American contemporary, *The Farm Journal* offered a prize for the heaviest turkey raised by a subscriber during 1889, which was won by a gobbler that tipped the beam at 27 pounds. The statement as to his feeding says that for the first two weeks he was fed a diet of light bread wetted with sweet milk, with a relish of hard boiled egg. Later on he was fed on bread and milk. The bread was made of corn and oats, ground to a coarse meal. This meal was made into a thick batter, with sour milk, salt and soda, and baked. This was his daily bread until able to eat whole corn. After the 1st of September (he was hatched May 15th) he had for a ration twice a day either corn or oats. During his rapid growth and development he had the range of the farm, and, no doubt, helped himself to several quarts of hoppers and sundry other articles.

### The Feeding of Fowls.

[FIRST PAPER.]

Two or three papers on this subject may, it is hoped, prove acceptable to our readers, especially those of them who have not made the feeding of fowls a subject of special study. Very much waste, it is apprehended, often takes place from feeding in a sort of mechanical way, without much variation of method during the entire year. Such a course may be borne

with when the fowls are of necessity kept in confinement, but when they roam at liberty, as they usually do on the farm, there should be as much variation in the methods of feeding, especially as regards quantity, and also to some extent as regards quality, as there is in the weather and natural food supplies.

As regards quantity, the simple rule in feeding adult fowls, and indeed fowls of any age, is to give them just what they will eat clean with avidity and no more. Any food left lying on the ground, or in the troughs, is a waste. While this is true in regard to winter feeding even, it is pre-eminently so in regard to summer feeding, as, at that season, the food fed may be eaten up clean, and still may sometimes be properly regarded as a waste, as had it not been given the fowls they would probably have provided for themselves an equal amount by foraging. We would not have our readers infer, however, that no summer feeding is required. It may be necessary throughout the season, but never in such quantities as though the fowls had no chance to furnish a part of what they need themselves. We have seen self-feeding troughs in which supplies of grain were kept all the time. Possibly these may be of some service where the purely fattening process is going on, but for other purposes they are a dead failure. If fowls are allowed access to a feeding trough so supplied with grain that they can help themselves at will, they will become more indolent than the boy with brawny arms and plenty of natural brain-power who is never required to do anything by his parents other than to eat and sleep, answer the roll-call at school, and seek out self-indulgences through the avenues made accessible through the possession of a plentiful supply of pocket money. The boy so treated will become a lubber, and the fowls so treated will become lazy bunts, although it is true they may be worth a little more per pound than the boy. Fowls thus fed will lay on fat, and the egg-production will gradually cease. After a time they (the fowls) will become machines, and nothing more, for the consumption of food without any tangible return. When just enough is fed to suit the surrounding conditions they remain active, and vigorously prosecute the search for what more they may want. The exercise thus taken is favorable to free egg-production, and also sustains undiminished the powers of reproduction, so that judicious feeding has a powerful influence on fertility or the opposite of this.

When the food fed in excess is soft in kind, and of a nature liable to ferment, the evil is much aggravated, as the food then tends to produce loathing, and ultimately induces indigestion, which culminates oftentimes in some form of disease. If the next meal is placed in the feed trough on the top of this fermented mass the evil is aggravated. No one but a sloven will allow himself to commit such a cruelty upon the fowls. Farmers' daughters never become so forgetful of the importance of cleanly habits as to feed their pets of the barn-yard in such a style. Their good sense will teach them the wisdom of feeding just enough, especially of this soft moistened food so susceptible of fermentation, and if, by a mischance, any of it is left they will apprehend the necessity of removing it. We do not mean to give any countenance to the opposite mistake of feeding the animals too little food, which would indeed be a false economy, for then the exercise required would be too much, the excessive expenditure of labor in searching for food being quite as truly a waste as when the food given is excessive in quantity.

Much must be left to the exercise of good sense in these matters. To know just how much food to give, the exact kinds to be given, and to know when to withhold, requires much judgment, and all these things will be much qualified by the attendant conditions.

### The Chickens, their Growth and Treatment.

By A. G. GILBERT, Central Experimental Farm, Ottawa.

On the chickens hatching, they were allowed to remain for 24 or 26 hours under the hen until they were completely "nest-ripe." With the mother they were then placed in coops of improved pattern specially designed for the poultry department. The mothers were confined to coops, but the chickens could run at large or return to brood at pleasure. The coops became the homes of the chickens until they were removed in the fall to winter quarters. On the chickens feathering sufficiently to keep themselves

warm by nestling together at night (generally at the age of four or five weeks), the mother was removed to her quarters in the poultry house to resume laying, and each colony of chicks returned to their own coop without hesitation. The coops were so arranged that on being closed for the night the inmates were secure against all enemies in the shape of rats, weasels, skunks, etc., while proper ventilation was not lost sight of. In rainy weather a double roof on each coop was drawn forward and made an excellent shelter. It could also be used as a shade in the hot season. Care was taken to prevent lice on the chickens. These pests are insidious and deadly foes to the young chicks and cannot be too energetically guarded against. A great deal of this precaution can be well observed at the time of setting the hen, by ridding her body of all such tenants. In the early summer of the year 1888, two methods of feeding newly hatched chickens were tried, viz., the dry (hard boiled eggs and bread crumbs) and the wet (bread and milk), but with one or two exceptions in the past year the bread and milk system was adopted, and with excellent results. This method is particularly adapted to farms where large quantities of butter are made and there is plenty of curdled milk to feed. The bread was put into milk, squeezed nearly dry and so fed. It contained moisture enough to do for drink, and in consequence, water was not given to the chicks until they were several days old. Sour milk was left for them to take when desired and was always enjoyed with great relish. Feed was given as frequently as they would eat and as much as they would take. Too much importance cannot be attached to the fact that the first few weeks of the chicken make the future fowl. A chicken half starved, or stinted from any cause in the first five weeks of its existence never regains the loss afterwards. Chickens for table use should be pushed from the first day they are able to eat. As the chickens grew up the last feed in the evening was gradually changed to wheat and crushed corn, and pains were taken to see that every chicken went to its coop with a crop full. The bread and milk gave way to shorts, cornmeal, ground oats, bran, and other suitable materials mixed in boiling water with a handful or two of ground meat to the chickens which could not get grasshoppers or other form of insect life. The mortality among the earlier chickens did not reach beyond 5 per cent.—*Report 1890.*

For the CANADIAN LIVE STOCK AND FARM JOURNAL.

### Duck Raising for Profit.

MISS G. WILLSON.

There is no poultry on the farm that is more useful and profitable than ducks; useful in their untiring destruction of insect life, while profitable as a hardy fowl, requiring little care, and demanding a good price in the market, both as a table delicacy and for their feathers, which is quite a consideration, as the latter are always saleable.

There are a great many varieties of ducks, the leading kinds which seem to have the preference for domestic use are the Rouen, Aylesbury, and Pekin, each claiming for their own some special recommendation, but any of the above-named varieties will give good satisfaction if well cared for, and the strain kept pure. In many farm-yards ducks are allowed to breed in-and-in until they dwindle in size, and being but poorly cared for, soon become anything but a credit to those that handle them. It is an object to have early ducks, so the first eggs should be hatched under brooding hens, which will make good mothers for the young ducklings. When ready to leave the nest give them a low-sided pen, covered with slats or netting, having one end closely covered to provide them with shelter and warmth at nights.

The best food at first is bread, moistened in milk or water. After a day or two any soft digestible food will do, but it should be cooked, especially if cornmeal is used, but oatmeal is better. A little cooked meat, chopped fine, and mixed with their food is good, but should be sparingly used, as it is relaxing. Too much water should not be given at first, a shallow tin kept filled will be quite enough, into which a handful of coarse sand should be thrown. While in the downy state they require a great deal of feeding, and should be fed not less than five or six times a day, as early as possible in the morning and just before going to rest at night. When a few weeks old they will do with much less attention, but should be fed, at least, three times a day, and with regularity, as they are

creatures of habit, and, if allowed their liberty, will usually return for their meals at the accustomed time. At this age they should have free access to a pond or stream, but beware of their enemies which lurk in such places, turtles being the most troublesome.

In fitting ducks for the early market they should have a course of feeding for two or three weeks of boiled or scalded meal, and soaked grain. It is to be remembered that corn is the most fattening food that could be fed. By soaking the grain there is not so much danger of their injuring themselves by over-feeding. Vegetables should be given them, and the necessary supply of fresh water and gravel. During this time they should be allowed only liberty enough to keep them in health. As soon as they get their first coat of feathers they are ready for market. Ducks that are intended for the fall or Christmas market should be sparingly fed, barely enough to keep them growing. Until a few weeks previous to killing them give them the same treatment as your early ducks had, the drakes will require longer feeding. Ducks, while growing, are subject to different diseases, the most troublesome being swollen lumps on the under part of the joints of their feet, causing great lameness, and which they seldom get over; and they are also often troubled with weakness in their back. These diseases are thought, by some writers, to be caused by feeding too much concentrated food while growing; and this, I think, to be the case, as some of my ducks that received no care whatever, but had to find their living as best they could, were not at all affected in this way. On the other hand, about one-half of them that were strongly fed with grain were lame, some becoming altogether useless, although all raised from the same stock.

## Horticultural.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

### The Best Method of Setting out an Orchard.

As the growing of fruits for market purposes has proven to be profitable to most farmers a short article on this question will be appreciated by those desirous of adding to their revenue in this way.

Of late years fruit, and especially apples, has become a profitable product of the farm. And those farmers who are fortunate enough to have good orchards of the proper varieties, are realizing good incomes from that source. As a natural consequence this has given a great stimulus to tree planting, and many new, and in a good many cases large orchards have of recent years been set out. It is my intention therefore, to give a few practical hints on this subject, from knowledge that I have acquired largely from my own experience. In the first place then, your best judgment should be exercised in selecting a suitable piece of ground. If you have a clay farm a sand or loam spot should be chosen, (if such is to be found on the place), regardless of location, as trees will thrive much better on this kind of soil. I would also suggest that the orchard be moved a reasonable distance from the house, as the practice of planting orchards round the house has been altogether too common, much to the detriment of both. The next step necessary after having selected the ground, is to build a good substantial fence that will be proof against all the animals on the farm. Thousands of dollars have been lost in this country by the destruction of young trees, just for want of a proper fence to protect it. After having the fence complete, I would plant spruce along at least the north and west sides of the orchard, as this would afford almost complete shelter from storms in that direction. This would be a great advantage, inasmuch as some of our best varieties have tender wood and are liable to be destroyed in this way. It is very desirable also that the land should be thoroughly underdrained, and I would recommend that the tile be set in the

ground about three feet deep and two rods apart. It would be well the previous fall to cultivate and prepare the soil as you would for a crop, and should it be preceded by a root crop all the better. Great pains should be taken in planting the trees straight, as it adds greatly to the beauty of the orchard. In order to secure this, it is a good idea to measure off the ground first, and place a peg or small stake in every spot where a tree is to be planted. Trees should by all means be planted not less than two rods apart; in digging the holes remove all the loose surface soil to one side, that it may be used around the roots of the tree after it is planted. If the soil is stiff or hard, care should be taken not to dig the holes too deep, for should the season come wet, water will lay at the roots of the trees and kill them, therefore, dig the holes large in circumference and shallow in depth, and if the roots of the tree be not sufficiently covered when level with the top of the ground, hill it up as you would your corn. Be sure to pare off neatly, all broken roots, and trim off the limbs, leaving the roots and limbs evenly balanced. After your trees are planted mulch them well with coarse manure. Be careful in keeping the manure back a few inches from the tree, for if it gets in contact with the bark it will cause it to rot. A great many trees have been destroyed in this country by mice and other vermin girdling them in the winter time, when the snow is deep. I find a good preventive against this nuisance is to hill up the trees with earth high enough so that it will be above the snow, and remove the same early in the spring. A great diversity of opinion exists as to the best varieties to select, although all are agreed that winter fruit is the most profitable. The same rule should be applied to the selection of fruit trees, that a man would apply to the selection of a good cow. The conclusion to be arrived at is: What variety will produce the most and at the same time command the best price in the market? I will not attempt to give any advice in the matter, further than by saying that if I were planting an orchard of three hundred trees this spring, I would plant one hundred Baldwins, one hundred Northern Spy, and one hundred Rhode Island Greenings.

RURAL FARMER.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

### A May Talk.

By MRS. ANNIE L. JACK.

As a child, I remember the May pole wreathed with flowers that never failed to bloom for the day, and the delight of all in this holiday of sentiment, when God says, "Let the earth bring forth." In Canada, with our short season and great hurry, there is no time to spare after the frost is out of the ground, work presses, and hardy seeds must be sown. We expect to have peas in June, and potatoes by Dominion Day in this province. By that time the bed of asparagus is ready to take a rest, and we stop cutting. This vegetable is not so well appreciated as it should be, though it is as easily grown as a crop of potatoes, and once planted will last for twenty years or more, if properly fertilized. We have an acre that has been fifteen years cropped, and seems as strong as ever. This is one advantage, no spring planting to do. The rows are planted far enough apart to cultivate by horse power, and the method and planting given to a field of corn will answer here. One-year-old plants are the best, and the variety called "Conover's Colossal" is largest and best. A top dressing of salt is said to be beneficial, at any rate it keeps down weeds, and is death to some insects. Being a marine plant it is supposed to need salt to supply the necessary food when planted inland, out of the reach of a saline atmosphere.

To cook asparagus, it is only necessary to put in as small a quantity of water as possible, so as to retain

all the juices, and the water in which it is boiled is thickened with a little flour, butter is added, and it is poured over the vegetable after placing lengthwise in a dish.

The medicinal value of asparagus is freely acknowledged, and it is recommended in cases of dropsy, being a diuretic, and possessing curative qualities in sciatica, gout, toothache, and all rheumatic affections. The head of this household proves yearly the truth of this, as the rheumatism only returns in early spring, before asparagus time.

Lettuce is the first salad ready for use in May, and should be largely used by those of a nervous temperament, as it contains a large quantity of milky juice, that is of a narcotic quality, a mild form of opium, and has a sedative effect on excitable people, without injurious results. Radishes are of value in cases of scrofula, and act on the kidneys, so that there is use and medicinal need for these vegetables that are with in the reach of every one in the month of May, when the stomach craves a change, after the long winter.

The first green in the garden is mint, prized for its use as a carminative, and as a sauce. In the latter form, it is often brought to table even in hotels, so badly made as to be quite spoiled, with a deposit of sugar at the bottom and too much vinegar. The mint after being finely chopped should be covered with water for an hour, then the sugar added (about four ounces to a tablespoonful of chopped mint), and enough vinegar to give the required sharpness, all vinegar being a mistake. Cress is considered a purifier of the blood, and if sown early in May grows very quickly. It is washed and eaten with salt, to bread and butter; no prettier dish comes to the table at this season, than a center of scarlet and white radishes, with a circle of green cress. Dandelions are grown now in hotbeds, like any other vegetable, and come as early as the first spinach. There is no doubt of its value in skin diseases and dropsy, while its action on the liver is thoroughly well known to the medical faculty. It is simply cooked, and when grown in hotbeds is crisp and sweet, not having the bitterness that is found when the roots are old and coarse, and outdoor growth, strong, quick growing and blanching greatly improve the flavor. In the woods of this fair Canada, there are Hepaticas blooming long ago, and Spring Beauty follows closely; wedelight in the Hepatica or "Hepsie dear," as one of the children lovingly named it long ago. But as May advances the woods are full of Trilliums, and of blue and white Violets, the latter growing near swamps, while the dainty blue Violets send their rootlets and flowers in every direction. There is nothing more beautiful than these shy blossoms of the woods, and they can be acclimatized in a wild garden, near the house, generally thriving best under the shade of a tree, and blooming a little later than in their native haunts. The yellow bells of the dog tooth Violets are quickly followed by the pale pink hearts of the wild Spectatites, all May flowers. There is a freshness in the air, a new life to everything, tree and shrub are bursting into leaf and bloom, all nature is awake, let us be up and doing. "It is not always May," and what is forgotten now, cannot be redeemed till another spring, and though our yearly miracle is often a little late compared with the southern climate, it is as Lowell says:

"I like our backward springs,  
That kind o' haggles with their greens and things,  
An' when you most give up, without more words,  
To see the fields full o' blossoms, leaves, an' birds;  
That's northern natur', slow an' apt to doubt,  
But when it does get stirred, there's no gin out."

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

### The Castor Oil Bean.

There is no ornamental plant more desirable for lawn decoration than the Castor Oil Bean (*Ricinus*), giving for the labor expended on its cultivation an ample return in graceful and beautiful foliage of oriental appearance. There are many different varieties, the *Borbonienses* *Asiaticus* being one of the most desirable, as it will attain such remarkable growth during the season, specimens often measuring from ten to twelve feet in height. The plants will thrive best in a shady place, and the foliage, under such conditions, has a more brilliant appearance. The beans should be planted as early as possible in soft rich soil. They seldom bear transplanting. The best way after selecting a suitable place is to remove the earth about a foot and a half in depth, and the same in diameter. Fill in with well-rotted compost, adding a little less

than one-third of the soil removed. Plant the bean about two inches deep, and as soon as the leaves make their appearance water freely, and occasionally with a weak dilution of liquid manure. This is the secret of success, as the plant will grow in proportion to the nourishment given it. The seed of the above-named variety can be purchased from Mr John A. Bruce, of Hamilton.

G. W.

## The Apiary.

### See Notes.

At the Rhode Island Experimental Station the subject of bee-keeping forms one of their departments, and from a recent bulletin we take the following conclusions they have summed up: (1) "We believe and have endeavored to show that bee-keeping is of sufficient importance to deserve the encouragement and protection of the State. (2) That bees are of great service to growers of various crops, as well as profitable to their keepers for their honey and wax. (3) That honey bees do not injure sound fruit, and that the damage done to unsound fruit must be comparatively light. (4) That to prohibit bee-keeping is unconstitutional, and that no one need refrain from keeping them on account of opposition due to ignorance, fear, jealousy, or the ill-will of their neighbors (though all reasonable precaution should be taken to prevent annoyance or accident). (5) That this prejudice against bees is sure to give way to public opinion in their favor. (6) That a widespread knowledge of bee-keeping would increase the products of the State.

For the CANADIAN LIVE STOCK AND FARM JOURNAL:  
**Alsike Clover for Bees and Farmer.**

By R. F. HOLTEKMAN, A.O.A.C., Romney, Ont.

It will certainly pay a bee-keeper who is also a farmer, possessing a farm with clay or clay loam soil, to cultivate alsike clover. Now because I am a bee-keeper it is to be hoped that no one will be uncharitable enough to form the opinion that I am blind to the farmer's interest, and sacrificing that for the sake of the bees. Upon light soil alsike clover is not the success it is upon heavier. For the bees there is no surer source of honey than from alsike clover, and a very beautiful honey it gives. For the farmer it is considered that alsike clover is as good a crop, or better than wheat, and it pays better one year with another than red clover. In parts of the county of Haldimand, it is grown year after year by almost every farmer, and this must be strong evidence in favor of it as a crop. If kept for seed there is little, if any second crop. If pastured right along it is very good, and it furnishes pasture continuous. I understand it has all the advantages for the soil that other clovers have.

Upon this subject, Doctor C. C. Miller says, in the American Bee Journal, he doubts if it pays to use land for plants useful for their honey only, the honey crop might be a failure, and then there would be no return from the land. The Doctor thinks melilot may possibly pay for this purpose. But a crop like alsike clover will give a paying crop even should the honey crop from it fail.

J. S. McLENNAN, Sydney, C.B., writes: "I have enjoyed the JOURNAL very much."

MR. EWEN PICKEL, Wellburn, writes: "I thought I would write to you telling you that I am very much pleased with the LIVE STOCK JOURNAL, so that I would like you to send it for the year 1890 as it is a very useful book for stock breeders to read and shows one where to go to get pure bred stock."

## Farmers' Daughters' Column.

### Our Prize Essay.

With the avowed object of helping our farmers' daughters to make the life on the farm more pleasant and more enjoyable through a wider knowledge of the work that may properly come under their guidance, we purpose offering a series of prizes for essays written by them on various topics. That there need not be any lagging on account of the want of subjects, we shall from month to month suggest a few, but it is to be remembered that a choice of any prize will be given to the writer of the best essay on any suitable subject that reaches us that month. You may choose your own subject, and if none better reach us that month, and the subject chosen is one that will interest the other readers of this department, a choice of any of the prizes will be given to the writer. The conditions to be observed by the writer are:—

- (1) The essay must not exceed one column in length.
- (2) The essays for competition for the prizes to be given in any month are to reach us on or before the 15th of the preceding month.

The subjects suggested for July competition are:—

- (1) The Best Breed of Fowl for the Canadian Farmer.
- (2) Flowering Shrubs Suitable for Canada.

Essays for June competition:

- (1) The rearing, feeding and preparing of geese for market.
- (2) The growing of raspberries for home use.

The following are the prizes we offer:

- (1) *The Canadian Queen* one year, \$1.00.
- (2) Seeds, cuttings, bulbs of any kind, selected from the catalogues of any seedsmen advertising in our columns, to the value of \$1.00.
- (3) *Vick's Illustrated Floral Magazine* one year, \$1.00.
- (4) *The Ladies' Home Journal*, one year, \$1.00.

This list will be increased later.

## The Feeding and Care of Ducks from time of Hatching until ready for Market.

[PRIZE ESSAY.]

By ELIZABETH DOBSON, Schomberg P.O., Ont.

First collect the eggs as they are laid. I prefer setting them under a hen, as she can be confined better than a duck. Dust the nest well with sulphur. As soon as the ducks are twenty-four hours old remove the hen to a coop in a dry sheltered place. Feed bread crumbs and shorts mixed with potatoes, as dry as possible. Give the ducks a hard-boiled egg if they are weakly. After, when they begin to eat, give them sweet milk to drink, and plenty of clean water. Potatoes and shorts or meal mixed are good with scraps of meat or liver chopped fine. Wheat screenings make excellent feed. Cabbage, lettuce, and greens chopped, are devoured greedily. The ducks should be fed five times per day till they are four or five weeks old, then four times per day will do. If allowed their liberty they will pick up a great deal. In the fall they should be closed in a yard where they should have plenty of water and sand given them. At this time they should also be fed on potatoes and meal mixed and given warm three times per day, and grain once. They should get all they can eat for two or three weeks.

## The Farmer's Garden.

[PRIZE ESSAY.]

By MISS AMANDA BROWN, Binbrook, Ont.

Most farmers think that all the time and labor expended on a garden is thrown away; and hence it is wholly neglected. Now such an opinion and such a practice should be corrected at once. There are many farmers who seem to think that if in the spring they plough up a few square rods, and plant the land with potatoes, corn, a few pumpkins, and a bed of onions, they do not need to venture any further.

The garden should be selected with particular reference to its exposure, and the quality of the soil. If both of these are good, there will be little difficulty in having a good garden. The soil should be deep, and easily broken up to the depth of about twenty inches, and be brought by repeated manurings and plough-

ings to a similar richness throughout. Nearly all our cultivated garden plants require to be brought forward as soon as possible, our short summers barely affording time for maturity, therefore the land should be ridged up in the fall, to afford early planting in the spring. The size of the garden must be governed by the quantity of supplies expected from it.

In making selections of seeds for a garden, great care should be taken in securing such varieties as will keep the article in season longest. On this, the profit of the garden depends. I do not pretend to dictate what articles shall be grown in a farmer's garden, as the state of the soil and the taste of the individual must be consulted. I will give you a list, however, of many articles essential to a farmer's garden.

Early potatoes, as those in field culture will furnish a later supply; corn, the sweet, and common early; lettuce; radishes; cucumbers; onions; carrots; beets; turnips; beans of which the bush, and large speckled cranberry, are perhaps the best; cabbage, the earliest that can be obtained; squashes; melons, such as the citron, muskmelon, and watermelon; tomatoes; celery; a strawberry bed; also currants, gooseberries, raspberries, and other common fruit should not be overlooked in planting a garden.

I do not suppose that anything like a list suited to every individual has been given, as one's own taste must be regarded. Particular locations may be more favorable to the growth of some and less favorable to the growth of others.

It can scarcely be doubted, that vegetables may be produced in the garden for half the cost of their equivalent in other kinds of food for a family. Let a person make a memorandum of every article taken from a good garden, at a fair market price, and the amount at the close of the season will be incredible. No person, whether rich or poor, should neglect this important branch of farming.

## Thoughts From the Girls for the Girls.

MISS MARTHA W. FISHER, of Benmiller P. O., Ont., writes us an interesting essay on the Farmer's Garden. She says: "If the farmers' daughters of this fair Dominion of ours would give more attention and care to their gardens, and take more interest in gardening, some farms would look more pleasant and attractive. A garden on the farm is indispensable, and besides, gardening is a pleasant work, and it is also very healthy exercise."

MISS MAY McMILLAN, Lorneville, Ont., forwards us two capital essays, one on the Farmer's Garden and the other on Raising Ducks. Her advice is practical and clearly stated: "The first thing necessary for a good garden is to have the ground well manured and thoroughly worked. All plants, except vines, should be placed in rows, as it is easier to weed and work the ground about them. . . . Nothing is of more use to a house than a good vegetable garden, neither does anything beautify it like flowers, flowering shrubs and a pretty lawn." The essay on duck raising is especially original: "Ducks are easily hatched and easily raised, but if set under hens the eggs should be occasionally sprinkled with warm water, for if not, the inner skin will become tough, and the duckling will not be able to make its way out. If under ducks this is not necessary, as the ducks, when off, will be in the water and the feathers will be wet, so the eggs are moistened in this way. . . . Of all the domestic fowls, ducks are the greediest. When feeding for market they should get Indian meal, mixed with milk and potatoes, mashed with shorts and other soft food."

MISS MAY DOYLE, Morrison, Ont., favors us with two first rate essays on the subjects that were set for this month. In respect to the garden she says: "The vegetables can be grown in rows with less trouble than in beds. The rows should be wide enough apart to allow of cultivation with a one-horse plow. In these rows the vegetables should be put from 8 to 12 ins. apart, berry bushes from 2 to 4 ft." The management of ducks she gives as follows: "Ducks should be fed bread and milk, chopped grain, and given plenty of fresh water. When four to seven days old you can let them go to the water. Feed twice a day on grain, chopped or whole, boiled potatoes, turnips, and once a week sunflower seed. Feeding ducks at night or morning will bring them home."

MISS NELLIE W. SMITH, of Druart, Ont., for one only ten years old forwards us a very interesting essay on the Garden of the Farm. It is a well written article, short and to the point. She says: "In the first place, the garden should be the best bit of land on the farm, well drained and manured. It should be

ploughed early in the spring and harrowed thoroughly. Lay it off in beds of suitable size—we like them long and narrow so that they may be easily worked from each side. The first thing to plant is lettuce, as it will stand quite severe weather. Then onions, beets, carrots, and radishes, closely followed by peas and beans, should be planted every two weeks in succession. Of course the garden should contain a few rows of some good kind of early potatoes, also turnips, parsnips, cauliflowers, and cabbages, the latter being early and late varieties. I must not forget to mention my favorite luxuries, watermelons and muskmelons, which should have a favored corner." In a foot note she says: "I am ten years old, and dearly love to work in the garden in the fine spring weather."

## Jottings.

**Farmers' Institute at Walkerton.** JAMES A. LAMB, Walkerton, Secretary of the Bruce Farmers' Institute, requests us to mention in May number, that it is the intention of the South Bruce Farmers' Institute to hold their annual picnic on the 10th of June next, when the Hon. Charles Durny, Prof. Mills and Prof. Saunders will be invited to attend.

**Holstein-Friesian Association.**—Owing to the delay in receiving the papers we have found that it would be impossible for us to give as full a report of the Holstein meeting, held at Woodstock on the 28th ult. as its importance would warrant, and hence on that account we shall hold it over until our next number, when we hope to make the report of the proceedings as complete as possible.

**Rogers' Peerless Hoof Ointment.**—This ointment has a good reputation that is increasing with its use amongst horse-men and stockmen. It is said to be invaluable for troubles connected with the hoofs, such as cracks and contracted feet. It is softening in its nature and it is claimed heals more rapidly without scars than any other remedy. As applied on sores, burns, or for dressings, after blistering, it is very useful. For sore shoulders and other like troubles, equally good results have attended its applications.

**Chatham Fanning Mills.**—This mill has reached a popularity amongst our farmers that warrants any one in speaking in the highest terms of it. Shippers are now made to all parts, and wherever it has been ever tried, it has given the best of satisfaction. Mr. Manson Campbell, of Chatham, Ont., has made this a specialty for years. Another feature of these mills is a roller attachment to clean all dust off such grain as beans. To gain an insight into the popularity of this mill, it is only necessary to refer our readers to the advertisement now appearing in this journal.

**Fertilizers.**—Mr. Joseph Stratford, of Brantford, who places an advertisement with us, is at present prepared to supply customers with the best brands of land salt, gypsum, and Portland cement. He is also agent for London Purple and Paris Green, two insecticides that fruit growers cannot afford to do without. The use of gypsum as an absorbent and as a fertilizer is not as much appreciated as it should be, and the same may be said of salt as a fertilizer. Mr. Stratford makes it a special feature of his work to handle only the best brands, and on that account he finds that his trade is spreading wonderfully. See his advertisement in this number.

**Live Stock Agent.**—Canadian breeders and importers will find it of great assistance to them in their work to correspond with Mr. E. G. Preece, of Shrewsbury, England, who is fully acquainted with the most prominent breeders and the best herds of Great Britain. Especially is this true in regard to the Hereford cattle and Shropshire sheep. As Mr. Preece has extended experience in the selecting of breeding stock and having special arrangements as to freight, as well as considerable experience in shipping, he is able to make very favorable terms for the purchase and delivery of live stock to any part. We would respectfully refer those interested to an advertisement appearing in this issue.

**English Barley.**—The Dominion Government, for convenience of prompt distribution, has placed a few cars of prize prolific two-rowed barley, just imported from England, with The Steele Bros. Company, of Toronto, who are prepared to ship it promptly, freight prepaid, to all who permit them \$4 per bag. Each bag contains 112 pounds of all purchasers can obtain any number of bags required. This firm are the introducers of "New Short White Carrot," which far exceeds all others in productiveness, and is a prizetaker wherever shown. Price, 50c. per lb. In their handsome catalogue they offer "Everything in Seeds, Plants, Bulbs." Their reputation as seedsmen stands at.—(Advt.)

**Shipping Facilities.**—We beg to draw the attention of subscribers to the advertisement of the Donaldson & Ross Lines of Steamships, which appears in this issue. These lines have unexcelled accommodation for horses and prize cattle to and from Canada. During the past winter the fine large steamship "Amarynthia" has been added to the Donaldson Fleet, and three fine new steel steamships to the Ross Fleet, all fitted up with the latest improvements necessary for the safe carriage of live stock. They have also, as with the other steamers of the fleet, provided full accommodation for the stowage of butter, cheese, apples, and other perishable farm products. Messrs. Robert Reford & Co., of Montreal, are the Agents, and will furnish all further information that may be required.

**Well-Merited Recognition.**—As a clear instance of the fact that no hand-drawn lines of natural separation stem the effectiveness of the world's workers, we cite the following words from a contemporary across the ocean, the *Agricultural Gazette*: "We heartily welcome the important step which the Dominion Government has taken with a view to the improvement of the dairy industry of Canada. For some time the dairy men of Canada have urged the appointment of a Dominion officer, whose duty it should be to take charge of the experiments in dairying now about to be conducted at the Dominion Experimental Farm at Ottawa, and at the branch experimental farms in the various Provinces, and generally to instruct the

dairymen of Canada, by lectures and bulletins, in the best methods of increasing and improving the Canadian supply. The Dominion Government has now acceded to this request, by the appointment of Prof. Robertson as Dominion Superintendent of Dairy Agriculture. Prof. Robertson is recognised as one of the highest authorities on dairying in Canada, if not in the United States. No better appointment could have been made."

**Canadian Ayrshire Association.**—Twentieth Anniversary of the establishment of the Canada Ayrshire Herd Record, at Montreal, and the Annual Meeting of Ayrshire I. and B. Assn. of Canada, was held in Montreal on the 14th of April last. There was a large attendance of members and patrons from the Province of Quebec and Eastern Ontario. Mr. Wm. Rodden, of Plantagenet, Ont., president. He was unanimously re-elected president. Although he urged the appointment of another, the meeting was not prepared to replace him at present. Mr. S. C. Stevenson, sec.-treasurer, and the executive committee, were re-elected. The reports showed that the first volume of the Herd Book had been revised, completed, and distributed. The printing of the second volume was nearly completed and would also be distributed. Copies of the books will continue to be furnished to each of the counties Agricultural Societies as books of reference. Each member of the Association who pays his subscription will receive the copies free of charge. Entries in the third volume are being received by the secretary, Mr. S. C. Stevenson, Montreal. Changes were made in the fees of membership and entries. It was agreed that the Herd Book would be printed frequently, of a more convenient size, and given free to subscribing members. Interesting particulars contained in the reports have to be postponed for future publication. The president submitted many interesting details concerning the value of pure bred Ayrshires to the dairy farmer. Also reports of milk tests that had been made in Great Britain, the United States, and Canada, some of which exceeded the Jersey tests. In every case they exceeded the results obtained from Mr. Guy's Ayrshires at London, Ont., last fall.

**Toronto Industrial Exhibition.**—The enterprising Directors of the Industrial Exhibition Association are again making great preparations for their next annual fair, which is to be held at Toronto from the 8th to the 20th of September next, and from now until the holding the same work will be vigorously pushed forward. For the past few weeks committees have been busily engaged revising the prize list, and have completed the same in most of the departments. They have increased some of the smaller prizes in the horse department considerably, and have also added a new section for pair of carriage horses, hackney or light steppers. The special sweepstake prizes for herds of horses to be shown during the first week of the fair have been left the same as last year. The Board have decided to add \$500 to the prizes in the cattle department, \$25 in the poultry department, and the prizes in grain and agricultural products have also been enlarged. Several special prizes have also been added to the list, the *Farmer's Advocate* and the Holstein Breeders Association of America having offered special prizes for a dairy test; the Hereford Breeders Association \$100 for Herefords; the Shropshire Breeders Association of England, \$50; the Canadian Clydesdale Association, \$30; and the Western Dairyman's Association add \$100 to the prizes in the dairy department, and many more have been contributed. In the live stock department, the arrangements will be the same as in previous years, the cattle having to be exhibited the second week only, with the exception of the classes in which special prizes are offered for horses during the first week. The Directors have resolved to make the coming exhibition excel in every way possible, as previously held, especially as a large number of conventions and other meetings are to be held in Toronto during the holding of the same, and on this account they wish to make it particularly attractive.

**What our Friends say of it.**—From among the many complimentary notices our contemporaries across the ocean have given the catalogue which our publisher prepared for the Messrs. Sorby, of Guelph, we take the following. *The Mark Lane Express* of London, England, says: "We have received a very handsome catalogue of the high-class stud of Clydesdales owned by Messrs. D. & O. Sorby, of Guelph, Ontario. We cannot refrain from advising our readers to obtain a copy of this work, as it is really a good example of what a private catalogue should be, viz., instructive. In each case the entire history of the horse is given in the clearest manner. . . . We have only to add that the illustrations are good, and the entire get-up and printing is excellent. In every way it is a credit to Canada." *The Farmer and Stock Breeder* of London, England, comments upon it as follows: "Messrs. D. & O. Sorby, The Woodlands, Guelph, Canada, have sent us a copy of a magnificently illustrated catalogue of their select stud of Clydesdale horses, from which we gather that, almost without exception, each pedigree traces, in one or other of the converging lines, to the blood of Darnley (222), Prince of Wales (673), and Macgregor (1487), three of the most remarkable sires ever found in Scotland, or indeed in any country."

*The North British Agriculturist* says: "We have received from Messrs. D. & O. Sorby, the well-known importers of Clydesdales into America, a copy of a sumptuously got up catalogue of their stock which they issued. The catalogue is distinguished not only for the artistic taste with which it is got up, but also from the interesting way in which the salient facts respecting the 'ancestral sires of high descent' are treated. The catalogue is illustrated by beautifully executed portraits of prominent animals in the stud. Fansiers of Clydesdales will find this catalogue at once ornamental and interesting."

## Publishers' Column.

### Our Watch Premium.

**Still Successful.**—Our Watch Premium is still continuing to attract workers, and to give satisfaction. We could print pages of testimonials in reference to the good opinion which our young friends have of the watches and of *THE JOURNAL*, but our space is too valuable, and we must refrain. However, we would refer inquirers to the finest of testimonials published in *THE LIVE STOCK JOURNAL* for February.

**Satisfaction Guaranteed.**—These watches are guaranteed to give satisfaction. We do not send them out ourselves. They are all shipped by the responsible firm of Kent Bros., Toronto who never seeing them. If there is any defect in the watch Messrs. Kent Bros. will make it right.

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

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

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

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

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

**The Banner Oat Premium.**—The Banner Oat Premium, is now withdrawn. Our oats are all exhausted and we can supply no more.

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

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

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

**How to Secure Your Own Copy Free.**—Send us \$2.00 with the names of two new subscribers, or \$1.50 with the names of 6 new trial subscribers, and we will advance your own subscription one year free. Remember that the subscribers so obtained must be new, old subscribers will not count. The trial subscriptions should be written out on blank order forms which we will supply on application.

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

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

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

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

## A New and Very Liberal Premium.

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

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

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

**Further Description.**—The above is the title, but it gives one a very poor and meagre idea of the book. We may say further that the work consists of 400 pages of heavy white paper, handsomely printed and bound, and moreover contains 215 beautiful engravings, many of them full-page, and a fine copper-plate map of the continent, showing the latest discoveries.

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

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

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

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

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

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

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

## Stock Notes.

*Editorial matter partaking of the nature of an Advertisement will not be inserted in these columns.*

### Horses.

W. H. MILLMAN'S (Woodstock), cob pony stallion, Lord Mar, won first prize at Boston, Mass., in a class of twelve.

THE HARAS NATIONAL IMPORTING CO., of Montreal, make a change in their old and place a new advertisement with us which all should see.

MR. ROW, of Avon, Ont., writes: "I have just sold the Cleveland Bay stallion, Santa Claus, advertised in the March number of THE JOURNAL. Mr. John Jackson, of Glenallan, Wellington County, was the buyer. In Santa Claus Mr. Jackson has one of the best stock horses in Canada."

The select stud of Clydesdales owned by Mr. Edward Charlton, Stocks field-on-Tyne, England, were recently sold. The seven brood mares averaged about \$600, the highest being \$1225 for Black Bess, and 1025 for a bay filly of 1884, both being bought by D. Riddell, of Paisley. The seven two-year-old fillies made an average of about \$300.

A draft of Clydesdales, numbering thirteen, from the Earnock stud, of which Mr. Robt. Wilson, Mansurac, is the proprietor, realized an average of £90 10s. 10d. each. The highest price was paid for Earnock Queen 7944, foaled in '84, got by Darnley 227, out of Bride of Lammermoor 2506, namely, 220 guineas (\$1,100).

MR. H. H. HURD, of Burlington (Hamilton P.O.), Ont., purposes selling by public auction, about the middle of June, some valuable pure-bred Clydesdale fillies, one, two, and three years old. These horses are all registered in the Canadian Clydesdale Stud Book, and are bred by some of the best breeders in that well-known centre of pure-bred Clydesdale stock, Markham township. Particulars of this sale will be announced in our issue for June.

W. H. HUTCHINSON, of Woodlands Farm, of Portsmouth, Ont., writes: I sold last week the imported Cleveland Bay stallion Ingmanthorpe Lad No. 85, Cleveland Bay S. B., to Mr. H. Lee Borden, of Tonti, Illinois. The Lad is a very stylish horse and was winner of first prize at Midland Central and Bay of Quinte fairs as three-year-old carriage stallion, and also diplomas at each fair as best carriage stallion any age last year. They know a good horse on the other side and will have him.

A correspondent, writing from Manitoba, says: "The latest additions to the Thoroughbred stock of the Melita District is a Clydesdale stallion, General Lee (5034), B.C.S.B., imported by John Miller, Esq., Brougham, Ont., August, 1885, owned by Mr. Wm. Ferguson, of Peterboro, who is going to farm on quite an extensive scale near Melita; also a Berkshire sow from J. G. Snell & Bros., of Edmonton, to increase the herd of G. L. Dodds. This animal is also from imported stock, and in farrow to an imported boar."

The tenth annual sale of Clydesdales and ponies, the property of the Marquis of Londonderry, Ireland, was held a short time ago. The Shetland ponies averaged from 8.3 to 10.3 hands, realized prices from \$100 to \$275. Clydesdale mares sold for from \$500 to \$2050, the latter price being paid for Star 3739, a get of What Care I. Mr. D. Riddell bought Regent for \$1550, and Conspiracy, out Pearl of Avondale, for \$2500. Two-year-old fillies averaged \$250, two-year-old colts \$425, yearling fillies \$130 to \$375, yearling colts \$100 to \$325.

We are informed that at the dispersion sale of Shire horses, the property of the late Hon. E. Coke, Longford Hall, Derbyshire, England, October 16th, 1889, the following prices were reached: Thirty females averaged \$725; four fillies averaged

## Advertisements.

### GREAT SALE BY AUCTION.

THE Company of the Haras National will sell by auction at  
215 St. Jacques, Outremont, near Montreal,

On Saturday, May 17th, 1890,

40 Stallions of the French Coach (Norman), Percheron and  
Britton breeds. Sale at one o'clock.

The Company of the Haras National.

### English Pedigree Live Stock

Shire Horses, Shorthorn and Hereford Cattle,  
Shropshire, Dorset, Hampshire and other  
Sheep, Berkshire and Yorkshire Pigs, etc.

**E. G. PREECE,**

LIVE STOCK AGENT,

SHREWSBURY, ENGLAND.

HAS Choice registered stock for sale at moderate prices, from  
the best studs, herds and flocks. Foreign buyers assisted  
in the purchase and shipment of stock. Choice animals of  
various breeds bought on commission. Special low freight.  
Highest references. Terms for buying 2½ per cent. All  
importers should communicate.

### Horses for Sale!

**SADDE HORSE.**—A beautiful bay, 7 years old, fine  
upstanding gelding, sixteen hands high and weighing about  
twelve hundred pounds. This horse is excellent under the  
saddle and an honest and stylish driver in every way. He is  
strongly muscled, clean limbed, and would make an excellent  
hunter. As a gentleman's horse none could be better. Will be  
sold reasonably.

**ROADSTER.**—This horse is a pleasing seal brown color,  
with superb action, and is a superior roadster. He is five  
years old, stands sixteen hands and weighs about eleven hundred  
pounds. He is stylish in appearance either standing or in action.  
Sound in muscle and limb and in every way a horse to be trusted.  
For terms apply to

J. C. DIETRICH,

GALT, ONT.

### THE IMPROVED MONITOR INCUBATOR.

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At the great N. E. Agricultural Fair, Worcester, Mass.

Duty will be paid on shipments to Canada. Send for  
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J. M. CROWLY, Gen. M'g'r,

TORONTO BUSINESS COLLEGE,

CORNER OF YONGE AND SHUTTER STS., TORONTO, CAN.

## Stock Notes.—Continued.

\$1455; only 3 aged stallions were sold, averaging \$1925, and one of these brought \$3150. Two mares brought \$3000 each. Fifty-two were sold in all. The preference of the company, assembling at Longford on the 16th of October, was very distinctly in favor of black, and whole black in particular.

At the Victoria Horse Bazaar, Belfast, Ireland, Mr. Robson held his thirteenth annual collective sale of Shorthorns. It was the most extensive one yet that has ever been held there, as no less than 173 lots were catalogued. The *Farmer's Gazette* says that owing to a lack of quality in some cases purchasers, though well disposed to buy, did not seem inclined to invest except at certain prices; the result was that the average was reduced to a somewhat low level. The highest average reached by any one herd was a draft of seven bulls that averaged about \$170. The highest price realized for a single animal was, in round numbers, \$200 for a bull.

HENRY BARR, of Douglas, Ont., has recently purchased from Mr. Arthur Johnston, of Greenwood, Ont., a very fine two-year-old pure-bred Clydesdale stallion, sired by his imported Prince of Wales horse Prince of Clyde (5259). This colt, though only in fair moderate condition, is full of promise. Sired by one of the very best bred Prince of Wales (673) horses ever brought to Canada, and out of one of the best mares ever owned at Greenwood. His feet and pasterns are just to the taste of your Glasgow expert. His joints are clean and well-defined. His bone is soft and hard as flint, and ornamented with a nice fringe of soft silky hair.

The *Farmer and Stockbreeder* says, of the Suffolk Horses: Bold as the assertion may seem, we candidly think that the Suffolk Punch has improved more rapidly of recent years than any other draught breed. It is in fewer hands than other breeds, being largely confined to its native county, but it may benefit eventually from the fact that it has been fostered and upheld by tenant farmers, by an industrious class of men who have to study utility more than fancy. Anyhow its progress has been solid and substantial, while the attempts on the part of breeders to remove defects and perfect the type of the breed, have been attended with wonderful success.

The largest sale of horses that has ever been held in Toronto, was conducted at Grand's Repository during the week of April 15th to 19th. The following figures will prove interesting. 39 carriage and saddle horses, sold Tuesday, brought \$11,727, average \$303.68 carriage and saddle horses, sold Wednesday, brought \$17,058, average \$251.93 draught and general purpose horses, sold Thursday, brought \$11,057, average \$119.79 draught and general purpose horses, sold Friday brought \$8,927, average \$113.40 ordinary workers, sold Saturday, brought \$3,440, average \$86. Total, \$52,229. The sale was well attended by buyers from all parts.

JAMES H. WILSON, of Lifford, Ont., has purchased from Mr. T. Evans, of Velverton, the Clydesdale stallion Just the Thing (1248), a grandson of Darnley (222). Mr. Wilson's enterprise in securing such a valuable stock horse is commendable. Just the Thing is a stallion of good stamp, and will beyond doubt do honor to his present stables. A local authority says: "Mr. Wilson's last efforts is sure to catch the farmers' fancy, and it is only what his energy and enterprise deserves at their hands, as he is now the premier horseman of the district, having controlled the following well known sires: Ivanhoe, Scottish Champion, Cuffie, and Pride of Aberdeen, and now for 1890, has Huntman."

Creighton is the name of Mr. A. C. Bell's latest purchase in the horse line. Creighton was bred in Kentucky; was sired by Beaumont, dam Souvenir by Harold (sire of Maid S.; 2-08½), 2nd dam Nutgall (full sister to Felix 2-18½) by Nutwood 2-18½. Beaumont is by Belmont (sire of 30 trotters in the 2.30 list, among them Nutwood 2-18½, and Wedgewood 2-10) out of Midnight (by Pilot Jr.), dam of Jay Eye See 2-10 and Noontide 2-20½. This is certainly rich breeding, and individually the colt is, barring size, first class. He is a rich bay in color with black points, when full grown will be 15½ hands high, and is more a Harold in appearance than a Belmont. He has a very speedy conformation, but, withal is very solidly built. He is quite a respectable addition to the trotting stock of Pictou County.—*Eastern Chronicle, No. Glasgow, N.S.*

W. H. MILLMAN, who has been visiting in the Western States, bought while in Kansas at a high figure the celebrated stallion Walker Sprague, record 2-34½, trial 2-22½, by Gov. Sprague 2-29½, dam by Capt. Walker, public trial 2-16, the sire of the dams of Harry Wilkes 2-13½, Gen. Garfield 2-21, Charlie Friel 2-18, and other noted horses. It is unnecessary to go further in his pedigree as it will be seen Walker Sprague is as finely bred as any trotting stallion in America. He has never been trained but 3 weeks in his life, is eight years old, stands 15-2½ and weighs, in fair condition, 1,100 lbs. This stallion can go any day in 2.30 without training. In color he is a beautiful seal brown, has splendid head and eyes, grand shoulders, back and thighs with the very best legs and feet. He has a number of colts rising two years all of which can trot fast and will soon show what Walker Sprague is.—*Sentinel Review, Woodstock, Ont.*

At the Stranrear (Scotland) show and sale of Clydesdales there were eighty-two entries. Owing to the large reserves placed upon most of the attractive lots few sales were made. A Prince of Wales colt, Stranrear, bred by Mr. Agnew, out of a mare by McCamon, was placed first over twenty yearlings, and also won the cup. In the yearling filly class, of twelve entries the first prize was taken by a Cairnbrogie Stamp filly. A get of the noted Top Gallant, out of a mare by Saquhar, was first in the two-year-old colt class. There were twelve entries of two-year-old fillies, and first was awarded to a get of Belted Knight's. A get of Ben Button was awarded first over the four three-year-old colts shown. The three-year-old filly class was stated to be the best in the show, and first was won by a filly from Mr. Riddle's Duke King, out of his famous Lord Lyon mare. It is stated that owing to the very high reserve prices, ranging up to \$2,250, only a few sales took place. The highest price realized was \$1,265 for the first-price two-year-old filly. A yearling colt sold for \$750 by private sale.

Stock Notes.—Continued.

MESSERS. ROBERT BRITH & CO., of this town, exhibited their imported Clydesdale stallion Sir Walter, at the annual spring horse show, under the auspices of the Hochelaga Agricultural Society, held on the Montreal Driving Park, Point St. Charles, on Tuesday. Eighteen as fine a lot of stallions as one would wish to behold appeared on the field, and after a minute inspection Brith's Sir Walter was awarded the gold medal and \$400 for the best Clydesdale on exhibition. Besides these prizes the Society guarantee sixty mares for service at \$10 each, with the privilege of service to as many more as may be put at not less than \$15 each, which makes the prize at least \$1,000 besides the gold medal. Mr. J. Clarke, of Ottawa, was awarded 2nd prize on his imported horse Windsor, and Mr. Robert Ness, of Howick, 3rd prize on Dandy Dimont. Messrs. Percy & Young, of this town, have sold their imported Clydesdale stallion Adventure to Mr. Edward O'Connor, of Stayner, Ontario, at a handsome price. He is five years old.—Notes in Mail from Bowmanville.

MR. T. EVANS, of Yelverton, the enterprising importer and dealer in Clydesdale horses, reports recent sales of two fine three-year-old fillies, Annie Park (796) by Sir Hildebrand (4024), and Cherry Lass (Vol. xi.) by Old Times (379), to Messrs. Lang and Meharry of Port Perry. These are really two good mares in color and weigh 3,200 lbs. It is needless to say they were bought at a long price as these are the mares which carried off so many prizes at the fairs last fall. Also, to a western party, Young Lily (Vol. xi.) by Baron O'Shieve (3403), a fine two-year-old filly who took second at last fall's shows with Paisley Jim (Vol. xi.) the winner of the Derby in Scotland last year. The latter, yet in possession of Mr. Evans, is a fine out-standing filly and is a half-sister to Just the Thing. With one exception this filly never took second place. . . . Owing to his fine selection in the last importation he has been very fortunate in clearing his stalls, notwithstanding the hard times. In his stables there are two fine three-year-old stallions, Auchentech (1333), C.C.S.B., [7441, B.C.S.B.], and the spirited Thistle (7342, B.C.S.B.). These have gilt edge pedigrees, are dark-browns in color, with superior quality, style and action.—Canadian Post.

H. GEORGE & SONS, of Crampton, Ont., write us that they have been very successful with their imported Shire stallion (Lenox No. 7574), at the spring stallion shows, having taken first prize at Belmont for the best draught stallion three years old, and sweepstake for the best draught stallion any age, and at Ingersoll he took first prize in a class of five imported Clydesdale stallions for the best draught stallion rising three years old. Lenox is a low set, blocky colt, with very heavy bone, and weighs 1,725 lbs. They also report the following sales of Ohio Improved Chester and Berkshire swine: One pair of Chesters and one pair of Berkshires to the Model Farm at New Brunswick; one pair of Chesters to James Kettie, Living Spring, P.O.; one boar, Chester, to Francis Smith, Campbellcroft, P.O.; one Chester boar to W. O. West, Jericho P.O.; one Chester boar to David Rendy, Tavistock P.O.; one Chester sow to W. H. May, Trenton; one Chester sow to R. M. Brown, Cowansville, P.O.; one boar and two sows to David Dobie, St. Augustine, P.O.; one Chester boar to Donald Jack, Newton; one Chester boar to John Hickingbottom, Blyth; one Chester sow to C. High, Beamsville P.O.; one pair of Chesters to Frank Knight, Avonroy P.O.; one Berkshire boar to G. D. Ellis, Theford P.O.

It has always been the practice at "Island Home Stock Farm," Grosse Ile, Mich., to give the horses exercise on the road; but the weather of the past few weeks has made the roads so muddy on the Island—the soil being a heavy clay, that Savage & Farnum have been compelled to give the horses most of their work in the spacious aisles of their immense stables—they, it is said, have the largest stallion stables in the world. The recent cold snap hardened the roads, and as soon as they became smooth enough, a grand parade around the Island was arranged. One of the drives around the island is about five miles long, and when the last animal was leaving the gate of "Island Home," the one that started first was just coming in on his way back, making a continuous line of first-class live stock five miles long. An amusing incident occurred which demonstrates the affection horses feel for one another. Savage & Farnum have a very fine imported Shetland pony, Lord Londonderry, and he lives in the same box stall with their famous imported Perc'eron Stallion, Pluivoise 3755 (683), where they tumble and play like a pair of puppies. When the procession started it was intended that Lord Londonderry should head the same, but the little rascal would not budge without his big stall companion, so to keep peace in the family, he was allowed to march with Pluivoise, every other animal going single file.

Cattle.

At a recent sale at Kendal, Eng., the average price brought by ninety-eight Shorthorn bulls was £18 12s. 6d. The highest price was about \$175, for a yearling roan.

In the stock notes of Mr. D. K. High, of Jordan, last month the brackets ( ) used by the British registration authorities were used by mistake instead of those of the Dominion Shorthorn Register = = =.

GEORGE BALLACHEY, of Edgemont Farm, Bradford, Ont., writes: Since writing I have sold the bull calf Major Myrtie 12325, to Mr. Landon, of Burford, and a sow and boar to Mr. McAlpine, of Aulhram. The youngsters are delighted by the birth of the first Shetland foal from the little mare Tiney.

Another portion of the famous Sittyton herd has been saved from foreign exportation, as Mr. Sutton Nelthorpe, of Seawby, Lincolnshire, has purchased all the members of the Violet tribe, said to be one of the oldest and finest families of the Sittyton herd. It is stated that these changed hands at high prices.

At the annual Galloway bull show and sale held under the auspices of the Galloway Agricultural Society at Castle Douglas, Scotland, there were shown one hundred and fifty-two young bulls, and the yearling class alone contained no less than one hundred and forty-five contestants. The prices ranged from £19 to £120.

SELECTED FARMS

(WESTERN ONTARIO.)

FROM \$1,500 TO \$25,000. Address:—

EDWARD HARRIS, 23 Toronto St., Toronto.

FARMS FOR SALE.

FARMS for Sale in Ontario. "LAKE'S LAND LIST" No. 19, with Provincial and County maps, is now ready, and contains descriptions and prices of stock, grain, dairy and fruit farms for sale and exchange. This is the largest list published in Canada. Money to Loan at low rate of interest on Farm property.

LAKE & CO., Land, Estate & Financial Agents, 18 King St. East, Toronto.

IMPORTERS' AGENTS.

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

JAMES CLARK,

Hay, Grain and Straw Merchant (Forage Contractor), 401 Parliamentary Road, GLASGOW, Scotland.

One Hundred yards from Buchanan and Queen Street Stations. Forage of best quality supplied to shippers of stock on shortest notice. References by permission to Mr. JOSEPH VANCK New Hamburg, Ont., and other Canadian Importers.

TELEGRAPH, "FODDER," GLASGOW.

NOTICE TO IMPORTERS!

CHARLES CHABOUDEZ,

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

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

CHARLES CHABOUDEZ,

Proprietor.

QUEENS and BEES

I AM prepared to furnish colonies of Bees in the Spring at Market Prices.

Italians in Langstroth Hives, good straight

Combs, \$8 00 each.

	1	2	3	6
Queens	Virgin, each.. 5 c.	40c.	37½c.	35c.
Italian	Untested.....	\$1.00	95c.	90c.
	Tested.....	2.00	\$2.00	\$1.25
	Selected.....	3.00	3.00	3.00

Orders filled in rotation.

Address,

R. F. HOLTERMANN,

Romney, Ont., Canada.

Cut this out and keep until you want Queens.

HOLSTEINS FOR SALE.

TWO YEAR OLD PEDIGREED HOLSTEIN BULL

FOR SALE. Well bred and kind. HAS PROVEN A GOOD STOCK GETTER. I will sell him cheap.

Address:—

WELLINGTON MUISINER, Port Robinson.

SHEEP FOR SALE.

IMPORTED AND CANADIAN-BRED SHROPSHIRE SHEEP FOR SALE, also Imported Clyde Stallion. All registered pedigrees. Agent for Dunas Sheep and Cattle labels. JOHN DUNKIN, Brucefield, Ont.

Stock Notes.—Continued.

JOHN McNRIL, of St. John's, Newfoundland, has recently imported four pedigree Ayrshire heifers and one bull. The bull, Roderick of Munlock, got by Victor of Munlock 1477, was first at the Amrossan show in November last. Ayrshire breeders will be glad to hear of this new addition to their ranks.

At a recent sale in Great Britain of Scotch Shorthorns, forty-two animals were sold at an average price of £35 12s. The highest price was paid for Cinderella 8th, 65 guineas (\$325). Five of this tribe averaged £49 19s. 6d.; four Vinnells averaged £42 five Averages averaged £41 7s. 4d.; and sixteen Moroguns averaged £33 1s. 6d.

ANDREW STRAWART, Gillies Hill, Ont., writes: "Our Durham cattle are doing well we have seven calves this season. We have sold four one-year-old bulls at good prices. Our Clydes are also doing well. We are just fitting our Clyde stallion (Pride of Cambleton (3550)), for the season; he is low set, with heavy bone, and is a good stock getter."

MR. L. B. VINCOTE, of Minnesota, reports to the Jersey Bulletin, a yearly average of 464½ lbs. of marketable butter from each cow of his Jersey herd. This is stated by the above organ to be the highest known to them. The daily ration is given as 4 lbs. each of corn meal shorts and bran, 3 lbs. of oil-meal, 40 lbs. of corn ensilage, and 5 lbs. of clover hay.

THORNTON'S CIRCULAR, a valuable record of Shorthorn transactions issued by Tho. Thornton & Co., of London, Eng., has reached our table. In it are given the prize Shorthorns for the year, and perhaps what is more interesting, a summary of the sales. The total sales conducted by this firm numbered thirty, at which were disposed 1348 head of Shorthorns, and the average price was about \$175.

MESSERS. SIDNEY, BARCLAY & CO., of Port Hope, Ont., have just secured to head their select little herd of Shorthorns, from Mr. Johnston, of Greenwood, the very excellent young bull War Trumpet, by imported Warfare, and out of Fashion's Lavender, by imported Duke of Lavender. War Trumpet is a short-legged, deep-bodied, thick young bull, with plenty of style and finish.

WILLIAM WILSON, of Edmonton, Ont., has very recently purchased from Mr. Johnston, of Greenwood, a very superior young bull of Mr. Johnston's well-known Crimson Flower family, the tribe that produced the Messrs. Currie & Sons' sweepstakes bull at the Provincial Exhibition at London, in 1889, besides many other equally good ones, including the cow that won first prize at the Provincial Exhibition at Guelph in 1883. Crimson Warfare, though young and lean, gives promise of being a thoroughly good one.

THE committee on agriculture of the local legislature of New Brunswick, recently passed resolutions, which were adopted, recommending the government to import ten Holstein bulls from three to twelve months old, and two Holstein heifers, to be sold at the exhibition to be held in St. John in the fall of the present year. It was also recommended that the present stock on the Provincial Stock Farm, including the entire horses imported, with the exception of one, Harry Wilkes, be sold, as they urge the government to keep the latter two years longer.

D. ALEXANDER, Bridgen, Ont., writes: "I see a communication from this County in your stock notes occasionally. You must remember this County is noted for large gas wells, and people are apt to be influenced more or less by their surroundings, which may lead to even praising one's own things, but it is not a desirable trait, and much better that others should see something to praise in our stock; good is that good loses. If names of animals were not mentioned we might think stock notes very complete, but good breeding in animals is like the same in lipeds, it carries unmistakable evidences with it."

MR. D. MCKAY, Box C, Owen Sound, Ont., writes: "I am a little behind the time this year in renewing my subscription to THE JOURNAL. I could hardly do without it, it is such a great help for us in the back country in the way of stock-raising. I have taken THE JOURNAL since it started, and it has shown me the necessity of getting somewhat better stock. This spring I bought from Smith & Son, Maple Lodge Farm, one Durham cow and heifer calf, which I paid a good price for. I have now a fine bull calf, dark red, got by a bull that Mr. Smith got from Mr. Dryden, M.P.P., and it promises to make a fine animal."

WILLIAM KOUGH, Travertine Farm, Owen Sound, Ont., writes: "Mr. Alfred Mann, of Bowmanville, visited us on 25th of March, and purchased the following Galloway cattle, yearlings, a bull and a heifer: The Baron, 6117, bred by W. Kough, sired by Claverhouse, Imp. (4250), 4614, dam Duchess Louise 2nd, 2830; Sybil K 3rd 5308, sired by Stanley 2nd, Ontario Experimental Farm, 2837, dam Sybil and, Imp. (10088), 4619. The Baron gained 2nd at both Provincial, London, and Toronto Industrial, last year. Sybil K 3rd, was 3rd at Toronto Industrial last year.

GEO. BALLACHEY, of Edgemont Farm, Bradford, Ont., writes: "I am glad to find the demand for young bulls is improving. I have lately sold the young bull Chesterfield = 12324 = to Mr. Bravan, of Dunnville; Berkshire boar to Mr. Good, Brant County; boar and three sows to Messrs. Cook Bros., Paris, Ont.; boar to Mr. Taylor, of Woodstock; boar to Mr. J. L. Campbell, Simcoe; and boar to Mr. J. F. Smith, Mohawk. Seven of my Shropshire ewes lambed twins before I got one single one, all have lambed now but one. I have this season tried crossing a Shropshire ram with some Leicester ewes. I am getting some monster lambs."

MESSERS. THOMAS BALLANTYNE & SON, of Stratford, Ont., have quite recently purchased from Mr. Arthur Johnston, of Greenwood, Ont., the very promising young bull, Indian Prince, of the grand old Nonpariel family, so well and favourably known at Sittyton and Kinellar, not only as prize stock and breeders of prize stock, but as milkers. The dam of Indian Prince, imported Nonpariel of Kinellar, is the best milker in the Greenwood herd, and Mr. Johnston says one of the best

## Stock Notes.—Continued

milkers he has ever known. Indian Prince is out of the same as the heifer calf that won first prize in 1889 at the Provincial Exhibition at London, as well as first prize at the Industrial Exhibition at Toronto the same year.

MR. C. M. WINSLOW, of Brandon, Man., breeder of Ayrshires, states that with ordinary pasture in summer, and good hay and but little grain in winter for a number of years, and of late wheat bran both summer and winter, the cows of his herd have averaged as follows: 1880, 20 cows average 6,025 lbs. of milk; '81, 11 cows average 6,176 lbs. of milk; '82, 9 cows average 6,672 lbs. of milk; '83, 15 cows average 6,168 lbs. of milk; '84, 16 cows average 6,814 lbs. of milk; '85, 11 cows average 7,025 lbs. of milk; '86, 16 cows average 6,238 lbs. of milk; '87, 16 cows average 5,782 lbs. of milk; '88, 16 cows average 6,358 lbs. of milk; '89, 15 cows average 5,836 lbs. of milk. This is a glowing eulogy on the milk-producing qualities of the Ayrshire.

JOSEPH YUILL, Meadowside Farm, Carleton Place, Ont., writes: "I have made the following sales of Ayrshires: Two cows, Teena of Meadowside—1401—and Susie of Meadowside—685—to Ontario Government, Guelph; three-year-old cow Venus, No. 115, one-year-old heifer, Queen of Meadowside—1199—to Robert Reid, Hintonburgh; one year-old bull, General Lanark, 185, to Amos A. McIntosh, North Williamsburgh; two two-year-old heifers, Robin of Meadowside 756, and Lucy of Meadowside 1432, and yearling bull Walter Shanley 857, to Joseph Mc Cord, Prescott; yearling bull Lord Lanark 887, to L. Edmonds, Jasper; yearling bull Meadowside 189, to Thomas Phillips, Woodbridge, Dakota, U.S.; and one heifer calf to D. McLaren, Magarry P.O.

JOHN McHUGH, proprietor of Kendalville Shorthorn herd, Cresco, Iowa, has placed an advertisement with us, stating that he will dispose of 120 head of his Shorthorns on June 11th and 12th. This herd includes 100 breeding females, of which one-fourth are well-bred Cruikshanks and a number are direct importations. The three stock bulls that have been mostly used are well-bred Cruikshanks, viz: Double Gloster 8526, Glamis 86711, and Royal Victor (a Victoria), Vol. 35. Mr. McHugh has successfully exhibited at the leading fairs, and with a group of females, swept all before him at Iowa, Illinois, Wisconsin state fairs. For full particulars we would direct the attention of our interested readers to our advertising column. This is a rare chance of securing good animals of this popular tribe, of a popular breed.

MR. DANIEL STEINMETZ, of Schoeneck, Lancaster Co., Penn., U.S., has purchased a small lot of Galloways from Mr. Thomas McCrae, Guelph, eight cows and heifers and a bull. The bull is a very fine one, imported, and one of the celebrated Hannah family. The cows are all of good quality and well bred, several of them having obtained prizes at our shows. Kate II. of Murrayton (19504) looked especially well, with a fine coat of hair and good lines. She was one of the best, and was closely followed by Victress II. of Closeburn (9649), by John Highlandman (1905), and Dainty Times (11506), by Lucky Times (3058), one of the prize bulls at the last Royal Show at Windsor, England. The young heifers Chusie (5027), and Jeanie Gardiner (5936), were winners at Ottawa and Kingston shows last fall. Mr. Steinmetz has an old acquaintance with the Galloways and likes them well.

HOLLERT BROS., of Cassel, Ont., write: The demand for choice Holsteins is better than ever this spring. During the last few weeks we sold three young bulls and a cow. Sykja's Harnton went to Mr. A. E. Plummer, Waterville, N.B., and the others to Mr. Wm. Forrest, Jamestown, Ont., and Mr. George Green, Oxford Centre, Ont., and the cow to Mr. Thos. Thompson, Iron Bridge, Algoma. The young bull which we lately shipped to Mr. N. H. Meagher, Q.C., Halifax, N.S., to head his fine herd, reached his distant home safely, per G.T.R., in the short space of forty hours' travel. He has given good satisfaction. Mr. Meagher expresses himself thus: From what I have seen of him, he far exceeds your representation regarding him. We also purchased from B. B. Lord, of Sinclairville, N.Y., the fine and richly bred imported cow Heimke. She will go to quarantine in May. This we believe to be the richest cow ever brought to Canada.

MR. ARTHUR JOHNSTON, of Greenwood, Ont., reports as follows: The demand for really good young Shorthorn bulls, fit to head herds, has not been lighter during the past ten years, though purchasers have very grudgingly paid anything like decent prices. There has been quite as much enquiry after females as ever before, but not many sales have taken place. The demand for heavy draught stallions has probably never been so dull in the past ten years, and the sale of registered mares has not been slow in many years. Ordinary useful work-horses have been absolutely a drug in the market. Farmers' store cattle have sold higher at public sales than they have ever done before in this country. Sheep of all kinds and all grades are very high, and in great demand. In short, all kinds of farmers' stock are high and scarce excepting horses. All classes of live stock have come through the winter in better condition than they have done for many years. My own Shorthorns are in the very best of form, without a really fat one in the herd.

MR. SMITH, OF THE FIRM OF MESSRS. G. SMITH & SON, of Grimsby, Ont., personally informs us that their herd has done excellently this season. They now have seventy head of pure-bred Jerseys all of the best strains. They expect a crop of about forty calves this spring, mostly all from their stock bull Nell's John Bull, a get of Canada's John Bull, and a richly bred St. Lambert, being out of Nell of St. Lambert, a daughter of the well known Ida of St. Lambert. This herd is a working one, as large quantities of cream are shipped daily to the leading dealers, restaurants, etc., of Toronto. By the aid of a separator they can deliver the cream to their Toronto patrons within five hours after it leaves the cow. The Welsh ponies also bred by these gentlemen are doing well. They will have, as soon as the foaling season is over, at least seventy head. They have made numerous sales during the past year, chiefly to our neighbors to the south. The firm at present, besides the large stock before mentioned, also carry nearly one hundred head of Berkshires, and Chester Whites. The Messrs. Smith are great believers in clover pasturage for pigs, and pea meal for their cows.

## SHEEP FOR SALE.

LORRIDGE FARM.  
SOUTHDOWN SHEEP.

Flock first established 1857. Commenced exhibiting 1867. Since then have taken over 1,200 prizes, including a large number of medals and diplomas.

Imported Rams used only.  
Stock for Sale.

ROBERT MARSH, PROPRIETOR.

173

Richmond Hill, Ont.

Dispersion of Mr. Henry Webb's Flock of  
Southdown Sheep in England,

Messrs. John Thornton & Co. will sell by Auction without any reserve at Streetly Hall, Linton, Cambridgeshire, on July 22, 1890 the entire remainder of this noted flock of Southdowns, bred entirely from the old Babraham Flock of the late Mr. Jonas Webb and comprising 250 yearling Rams and ewes (being the lambs of 1889).

Particulars may be had of JOHN THORNTON & Co., 7 Princes Street, Hanover Square, London W., England.

## JERSEYS FOR SALE.

## Jersey Bulls.

GUY FAWKES, solid fawn, 2 years old. 1st prize at Peel Co. Show, 1888-1889. A model bull.

OLIVER TWIST, calved August 20th, 1889, solid, light fawn, from St. Helier bull, out of 1st prize cow. Both are registered.

Also, for sale, a few yearling heifers in calf. Prices reasonable. Come and see, or address

J. C. SNELL,  
EDMONTON, ONTARIO.

## JERSEYS FOR SALE.

Several fine Jersey Heifers; choicest strains. Prices low.  
Write G. M. BEEMAN, NAPANEE, ONT.



## FOR SALE.

CLYDESDALE STALLION.  
Bred from imported stock, 3 years old in May, good animal.

ALSO 4 SHORTHORN BULLS,  
Ages ranging from 7 months to 3 years.

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

John Idington,

STRATFORD, ONT.

IMPORTED CLYDESDALE STALLIONS FOR SALE  
From three to six years old. We have just received a fresh importation, including the winners of several prizes in Scotland. Also a few Canadian-bred Colts and Fillies on hand.  
MORRANCE & BEATTIE, Summerhill Farm, Markham P.O., Ont.

## SWINE FOR SALE.

## THOROUGHbred BERKSHIRES.

FOR SALE a number of Thoroughbred Berkshire Sows in pig; Young sows and boars 7 months old. Young Pigs 6 weeks old. Registered Pedigrees, all bred from Imported Stock. Prices reasonable. Address,  
591 C. R. DECKER, Chesterfield P.O., Ont.

## Berkshires for Sale.

I HAVE for sale a few choice Registered Berkshire Boars about two months old, also a few sows from two to six months. I can ship to order. Satisfaction guaranteed.

HENRY ARKELL,  
Arkell, Ont.

## SOME CHOICE

SUFFOLK AND BERKSHIRE SPRING PIGS  
FROM IMPORTED STOCK.

\$6 EACH, OR  
\$10.00 PER PAIR.  
(Will Register.)

Also Sows and Pigs of different ages. Three Bull Calves 14 months old, from Imported Bates Bull. Prices reasonable. Dark Red in Color.

F. J. RAMSEY, Dunnville, Ont.

## CHESTER WHITE PIGS

We are now Booking Orders  
for spring pigs.

This is the time to order and secure first choice.

R. & J. GURNETT,  
Ancaster, Ont.

## BERKSHIRES.

SPRING LITTERS OF  
CHOICE REGISTERED BERKSHIRES

Now Ready for Shipment. Also a few Choice Shearling Shropshire Rams.

BROWN BROS.,  
SPRINGVILLE ONTARIO.



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

T. W. PALMER'S  
LOG CABIN STOCK FARM!

150 PERCHERONS.  
100 JERSEYS.

To be Disposed of this Season.

For catalogues and particulars address

MERRILL BLOCK, Detroit, Mich.

## BROOKSIDE FARM,

New Glasgow, Pictou Co., N.S.

Standard-Bred Trotters,

AMERICAN

CATTLE-CLUB JERSEYS.



BALLACHEY, Bradford, Breeder of Percherons, Shropshire, Shropshires and Berkshires. Stock for Sale.

No other paper published in Canada or out of it gives the farmer such value for his money as The Live Stock Journal.



Stock Notes.—Continued.

J. E. BRAMBLE, of Lakehurst Farm, of Oakville, Ont., kindly favours us with the following results of his sale on the 10th of April. The attendance was good. Cow, Hugo Beauty 31576 to John Crowe, Guelph, \$520. Cow, Doe of Copley Springs 32443, to Joseph Stratford, Brantford, \$175. Cow, Jetsam 32894 to Wm. Rolph, Markham, \$190. Heifer, Jetsam's May 62530 to Mrs. E. M. Jones, Brockville, \$190. Cow, Dolly 2nd 32883 to Clarkson Jones, Toronto, \$130. Cow, Pearl of St. Lambert 8142, to Mr. Mills, Toronto, \$120. Cow, Lady Coreopsis and 41266 to Mr. Dodds, Toronto, \$100. Cow, St. George Heroine 36097, to Mr. Puffer, Brampton, \$105. Heifer, Lakehurst Beauty to J. C. Snell, Brampton, \$105. Heifer, John Bull's Paintress 62531, to F. A. Fleming, Weston, \$145. Heifer, Brevia Pogs 52940, to J. A. Walker, Chatham, \$110. Calf, Jetsam's Dora 61702, to Peter Dixon, Holstein, \$75. Calf, Heroine Pogs 63422, to Peter Dixon, Holstein, \$75. Bull, Mighty Dullor 24051, to J. L. Clark, Brampton, \$155. Bull, Hugos Bonanza 24052, to Hugh Clardge, Brampton, \$65. Bull, Pearlus John Bull 24530, to Robert Thomson, Hamilton, \$75. Bull Calf, Dolly's John Bull 24540, to Mr. Mills, Toronto, \$00.

A. C. HALLMAN & Co., of Spring Brook Farm, of New Dundee, Ont., writes: The demand for choice Holstein-Friesians seems to be stronger than ever. Since our last report we made the following important sales, and expect more soon to follow: The imported cow Worthwell, No. 1023 H.F.H.B., to Mr. Andrew Henderson, Raseville, Ont. The imported cow Artis Kattie, No. 9921 H.F.H.B., to Prof. Thomas Shaw, Ontario Agricultural College, Guelph; also the imported bull African Prince, No. 1270 H.F.H.B. These are a fine pair and ought to make a favorable impression. The cow, Artis Kattie, is a half-sister to Prince of Artis, a bull of great quality and one of the herd bulls at Lake Side, owned by Smiths, Powell & Lamb, Syracuse, N.Y., and daughter of that grand old sire Artis, 127 N.H.B., so well known to Holstein breeders. The young bull Wigton, No. 13333, we sold to C. Wagler, Baden, to head his herd of Holstein-Friesians, and this bull has for his sire Empire, No. 588, whose half-sister, Pledge 1006, has a record of 110½ lbs. in one day, and 6,105½ lbs. in two months, and Capia 1007, with a record of 99½ lbs. milk in one day, grand dam, Empress, No. 539, with a record of 19,714½ lbs. milk in one year. Our herd has wintered nicely, and seem vigorous and strong. We have a fine lot of calves dropped of both sexes, of extra breeding and quality.

MRS. S. SMITH BROS., Churchville, Ont., write: "Our herd of pure bred Holsteins, including 2-year-olds, have given on an average 1378 lbs. of milk from January 1st to April 1st (90 days). Our sales have been good. We send to Agricultural College, Guelph, a bull and a heifer, America's Grandson and Alvo. The former is from Modest Girl 3rd and America's Champion, whose dam gave 97 lbs. of milk in one day, 904 lbs. in 10 days on grass alone, and 21 lbs. 10 oz. of butter in a week. Modest Girl 3rd gave 41 lbs. of milk in one day, 1155½ lbs. in January, 1890, as a 2-year-old. Her dam as a 2-year-old gave 10,229 lbs. of milk in a year, whilst her sire's dam, Princess of Wayne 3rd, gave 16,122½ lbs. of milk in a year, 18 lbs. 12 oz. of butter in a week, 76 lbs. 12½ oz. in 30 days. Alvo comes from advanced registry stock on both sides, and their records we all been good. H. & J. A. Macaulay, of Harriston, get Siepkje 4th's Mink Mercedes Baron, Hijekje 4th, and Young Wiebien. The young bull's dam gave 41½ lbs. of milk in one day, 3242 lbs. in 90 days, and 13½ lbs. of butter in a week as a two-year-old. Hijekje 4th is from Hijekje 2nd (imported), who produced 18 lbs. of butter in a week, 65 lbs. of milk in a day. Young Wiebien is from advanced registry stock and is a very promising heifer. Mr. McNiven, of Winona, gets a grand foundation herd. Siepkje 3rd's Mink Mercedes heads the herd, and Maud Tensen, Lady Marringa 2nd, Margaret 4th, and Witzyle Sjut. Maud Tensen's dam gave 19 lbs. of butter in a week, 2117½ lbs. of milk in March last. Lady Marringa 2nd is strong in the Billy Boelyn and Ondine blood. Ondine gave 90½ lbs. of milk in a day. Margaret 4th's dam gave 600½ lbs. of milk in 184 days. Witzyle Sjut is strong in the blood of the noted Pel family. Then we sold a fine young bull to Mr. Thomas Butler, of Durham Centre, Belle of Orchardside's Edgely. His dam gave 1037½ lbs. of milk in 30 days, has been a prize taker and is in the advanced registry. The sire is our Duke of Edgely."

Sheep.

At the dispersion sale of W. L. Mason's (Eng.) flock of Lincolnshire sheep, 571 head sold for an average of about \$20.00.

A Hampshire Down Sheep Breeders' Association has just been formed in England for the purpose (amongst many others) coming within the scope of such an Association) of the establishing and publishing of a flock book for this breed of sheep.

MRS. L. V. HALL, MANSELL, AND WALTERS (Eng.), in their annual abstract of Shropshire sheep sales during 1889, show that registered sheep brought 25% more than unregistered ones. Over 12,000 sheep of this breed passed through their hands, and the highest prices were \$1000 for ram for Mr. Graham's flock, \$900 for ram for flock of Messrs. P. & G. Evans's flock, and \$725 for one from flock of J. E. Famer.

The reports from all parts appear to tally in pronouncing this a very fruitful year for lambs. Not only do many Canadians quote instances of this, but from across the ocean the news is equally pleasing to British stockmen. The North British Agriculturist reports a case of a Shropshire ewe belonging to Mr. Blakeman, of Drayton, giving birth to the unprecedented number of seven lambs. Four were born alive, and the other three were dead when lambled. The ewe is stated to be quite healthy, and is nursing three of the lambs, the fourth being handed over to the care of a foster mother.

Messrs. JOHN THORNTON & Co., 7 Princess-street, London, England, will sell by auction, without reserve, on Tuesday, July 22nd, 90, at Streety Hall, the remainder of Mr. Henry Webb's Southdown flock, comprising 250 yearling sheep. These lambs are principally by Gloucester, Enterprise, General, and that famous sheep Cambridgeshire, bought by the Duke of Richmond last July for 210 guineas. The flock of Mr. Webb is made up mostly by drafts from the old Balafrank flock of Mr. Jonas Webb that had a world-wide reputation. This

- IMPORTANT -

# Shorthorn Sale.

## FROM THE KENDALLVILLE HERD

### CRESCO, IOWA.

120 HEAD.

20 Males and 15 Bulls of Cruickshank Families Proper.

SALE, JUNE 11 AND 12, 1890

ON the above date the most important offering of Cruickshank Cattle at public sale in 1890, will be held in CRESCO, IOWA, a night's ride from Chicago. One-third of the Scotch Females (20 in number) at present in the herd, will go to the highest bidder without reserve. This draft will include, among other Sittyton Families, four Lavenders, five Victorias, three Brawith Bud, Secret, Venus, etc., etc.

Numbers considered, the quality of this draft has never been excelled at public sale in the West. Sooner than incur the trouble and expense of sale in Chicago, I shall pay half the freight on all purchases to destination.

The larger part of sale draft is made up of Scotch-topped animals, including many show-beasts. A Canadian by birth, and a liberal purchaser at various times, of the best Scotch cattle to be had in Canada, I extend to my Canadian friends a cordial invitation to visit my sale and secure some now popular Cruickshanks.

FOR TERMS AND FURTHER INFORMATION, WRITE FOR CATALOGUE.

J. W. & G. G. Judy,  
Auctioneers.

John McHugh, Proprietor,  
Cresco, Iowa.

## FOR SALE.

PURE BRED

### IMPORTED CLYDESDALE STALLION,

BENLEE OF CULLEN (5537), Vol. X., foaled 26th June, 1886; Color, bay, white stripe on face; hind feet white above pasterns. Sire, Leopold (3766), Vol. VII.; Dam, Het (1638), Vol. V.; Sire of Dam, Young Lofty (991), Vol. I. Also

### ONE IMPORTED CLYDESDALE MARE,

GEORDIE Vol. XII., foaled June 1887; Color, dark brown, two white legs and white face; Sire, Sir Archibald Buchanan, (540), Vol. XI.; Dam, Jess of Smithston (7953), Vol. XI.; Sire of dam, Campsie (119), Vol. I.

Horses can be seen at stable, EAST STREET, GALT. Full particulars by post. Address,  
JAS. McCOMBIE, Galt, P.O., Ont.

The i. s. j. is read by 1000 of the best farmers in Canada. Remember that when advertising.

## Three Young Shorthorn Bulls For Sale

MILKING STRAIN. FARMERS' PRICES.

ALEX. RITCHIE, Inverary P.O., Ont.  
NEAR KINGSTON.

FOR SALE 5 Young Shorthorn Bulls and 30 Berkshire Pigs.  
All first-class. Send for Catalogue and Prices.  
EDWARD JEFFS, BOND HEAD.

## Shorthorn Bulls.

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

A. C. BELL,  
TROUT BROOK FARM, New Glasgow, N.S.

**Stock Notes.—Continued.**

final dispersion of the fountain head of Southdown blood will afford Canadian breeders a grand opportunity. See advertisement this issue.

In a recent issue, the *Farmer and Stockbreeder* mentions the following noted dispersion sales, each of which was, in its way "epoch-making." On July 3rd, Mr. Henry Webb sold the greater part of the Stanley Hall Flock, which is descended from the flock of James Webb, with the result that 498 head, all ewes and rams, averaged about \$57.00. On the following day (July 4th), A. F. Druce sold his Fyfield flock of Oxford Downs, which was descended from Mr. Samuel Druce's pioneer flock of the breed. 447 head, including 100 lambs, sold at an average of about \$50.00. On September 6th, the entire flock of Shropshires, which were bred by Mr. T. Mansell for many years, was sold, and the 381 head, including over 150 lambs, brought an average of about \$50.00.

**Swine:**

WM. SANDERS SPENCER, of Holywell Manor, Eng., reports the sale of fifty-three boars, yelts, and sows of his improved Yorkshires sent off within twenty-four days. So far this season one hundred and sixty-six pigs have been sold from this herd.

Russia is now bidding for the British bacon market. The first consignment reached London a short time ago, and it is said to be of a quality about midway between the American and Canadian on the one hand, and the best home sorts on the other.

E. D. GEORGE, of Putnam, Ont., writes: The demand for the popular Chester White is ever increasing; sixty-seven spring pigs to date; the recently imported sow Ohio Girl, bred by C. H. Gregg, Akron, Ohio, farrowed ten beauties to-day, sired by Hill Top, the most successful Chester hog in the U. S. show-ring last season.

R. & J. GUNNETT, of Ancaster, Ont., write: "Our pigs are wintering fine. Two sows, our last importation, are fine ones, being very lengthy, and, we think, just the pigs to suit the present market. In December, 1888, seeing a half-page advertisement of J. H. Eaton, Bucyrus, Ohio, in *Ohio Farmer*, we sent for price list, and sent \$25 for a sow in pig (he guaranteed safe arrival and good condition). The sow arrived here sometime in February in a terrible state, she could scarcely walk, and was not in pig, so we had her served by our own boar, after a good deal of trouble. The sow was so bad that I thought she would die. We wrote to Mr. Eaton stating the condition of the sow, and asked what we were to do; he said he would give us anything on his list at half-price. We waited until July to see whether the sow would get better or not, and as she got somewhat better, although very lame, we concluded to take Mr. Eaton at his word, and sent for a pair of three-month-old pigs, sending \$13, list price being \$25. We heard nothing from Mr. Eaton for some time, so we wrote to him; still no answer. Then we wrote two or three times more, but could get no answer. Hearing he was at Buffalo International Fair, we went over to see him, but did not see him personally. His man told us that he was perfectly reliable, and he would speak to him. I told him we did not want fall pigs, and he said Mr. Eaton would do what was right. After waiting some time we wrote and told him if he did not send pigs or as agreed we would advertise him as a fraud; he sent the pigs in November. They arrived all right, but no pedigrees, and although he made the excuse that he had mislaid the order I thought it rather lame, as I had written to him so many times. Since the pigs have arrived I have written four or five times for pedigrees, but he is not gentlemanly enough to answer me. As these pigs cost us between \$60 and \$70 I consider Mr. Eaton has beat us out of this, except pork price for the pigs. If he was a Canadian I would enter an action against him for damages, but as he is an American I can do nothing but let other intending purchasers know how we have been used by him, so that they may not be beaten as we have been. Hoping that this will not occupy too much space, but as it is a matter of importance to others I think it should be published."

**Poultry.**

A. G. H. LUXTON, of Hamilton Poultry Yards, Hamilton, Ont., reports the following sales from January 1st: Three Cayuga ducks and drake, F. W. Deane, New Bedford, Mass.; trio Rose Comb Brown Leghorns, George Cooper, Orangeville; 1st prize Light Brahma cock, at Hamilton and Toronto, and two hens, Geo. Hanson, Toronto; Black Spanish cock, Mrs. Kay, Galt; 2 Ayshire cows, 1 heifer and 1 bull, imported for C. S. Aylwin, Fort Elgin; 1 English pug dog, Mrs. Schuler, Hamilton; 1 pair White Rose Comb Leghorns, 1 trio Pekin Bantams, 1 trio Houdans, 1 trio Light Brahmas, 1 Black Hamburg Cockerel and 7 hens, 2 single comb White Leghorn hens, 1 trio Silver Wyandottes, Albert Cox, Hamilton; 1 Black Hamburg Cockerel, 1 single comb Brown Leghorn cockerel, 1 barred Plymouth Rock cockerel, Wm. Newson, Northville, Mich.; 1 Langshan cockerel, John Duncan, Collingwood; 1 trio Langshans, George S. F. Garden, Sealforth; 1 trio Cayuga ducks, Geo. A. Chambers, Winona; 1 Silver Wyandotte cockerel, H. Goodie, Shanty Bay; 1 trio barred Plymouth Rocks, W. H. Millman, Woodstock; 2 Silver Laced Wyandotte hens, Geo. E. Bullock, Jr., Doon; 1 White Plymouth Rock cock, 3 Light Brahma hens, Malcolm Campbell, Swan Lake, Manitoba; 1 Light Brahma cockerel, J. Schlichter, Washington; 1 trio Huff Cochins, R. L. Selby, Toronto; 1 Silver Laced Wyandotte cock and 3 pullets, W. H. Ulley, Montreal; 1 Brown Leghorn cockerel and pair Golden Sebright Bantams, Geo. Bennett, Charing Cross; 2 barred Plymouth Rock cockerels, Wm. McClellan, Hornley; 1 White Leghorn cock and 5 hens, Rich. Van Winkle, Lodi Hergen Co., New Jersey; 1 pair Red Fowls, H. A. Chadwick, Winnipeg, Manitoba; 2 barred Plymouth Rock cockerels, A. & J. Hias, Glen Sandfield; 1 brown bearded Red Game Bantam pullet, C. H. McCrae, Dunnville; 3 barred Plymouth Rock hens, C. W. Lawton, Beeton; 2 barred Plymouth Rock cockerels, R. S. Stevenson, Ancaster; 1 pair White Ponters Pigeons, Wm. Gibson, Grimsby.

**Remedy for Barrenness.**—Partially barren mares, or cows, irregular breeders, will bear attention to their advantage by addressing H. W. Campbell, Lakeview, Wis.—(Adv. 34)

**GUERNSEYS!**  
**THE GRANDEST OF DAIRY BREEDS**

Combining the richness of the Jersey with size approximate to the Holstein or Shorthorn, but standing ALONE and UNQUALLED in producing the richest colored butter in midwinter on dry feed. Gentle as pets, persistent milkers, and hardy in constitution, they combine more qualifications for the dairy or family cow than any other breed.

**IN THE OLD BRICK GUERNSEY HERD**

Are daughters and grand-daughters of the renowned Island prize-winners: Excelstar 1st, Cato, Fair Lad, and the famed Squire of Les Vauxbelets, of St. Andrew, Jeweler and Lord Fernwood and nearly all the descendants of the famous Swain sisters, "Katie" and "Cottie," a strain not exceeded, if equalled by any other. Jeweler 13th, son of Jeweler out of J. J. Clapp's tested cow Hazelnut, 1788, leads the herd with Lord Fernwood's son, whose dam won special premium at the N. Y. Dairy Show. Squire Kent, grand-son of the noted Lady Emily Foley and Squire of Les Vauxbelets and Kohinor, also winner of the first premium at N. Y. Dairy Show, are coming into service. All particulars in regard to the breed and herd, individually, cheerfully given.

S. P. TABER WILLETS,  
ROSLYN, Long Island, N. Y.

**LITTLE'S PATENT FLUID**  
**(NON-POISONOUS)**  
**SHEEP DIP AND CATTLE WASH.**

**CHEAP \* CONVENIENT \* AND \* EFFECTIVE.**

The best Non-poisonous Sheep Dip and Cattle Wash in the world.

A "CHEMICAL FOOD" FOR THE WOOL.  
Rapidly increases the quantity and improves the quality.

**IT IS EASY TO USE,**

Requires very little preparation, mixes instantly with cold water, leaves no sediment, no scum, no waste.

**CERTAIN DEATH TO LICE, MANGE,**

And all insects upon Horses, Cattle, Calves, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, Saddle-Galls, Sore Udders, etc.

**EXTRACTS FROM SOME OF OUR NUMEROUS CANADIAN TESTIMONIALS.**

"We think a great deal of it."—Prof. Brown, late of Agricultural College, Guelph.

"Sure death to lice on cattle and colts."—Robt. Marsh, Lorridge Farm, Richmond Hill.

"Gives great satisfaction."—W. Whitelaw, Guelph.

"Best ever used."—Jas. Russel, Richmond Hill.

**17 GOLD, SILVER AND OTHER PRIZE MEDALS** have been awarded to Little's Patent Fluid Dip in all parts of the world. Sold in large tins at \$1.00.

Special terms to Breeders, Ranchmen, and others requiring large quantities.

MANUFACTURERS AND PROPRIETORS,

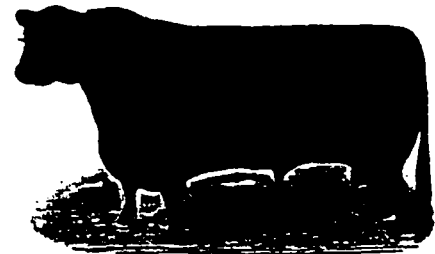
**Morris, Little & Son, Doncaster, Eng.**

Ask your nearest druggist to obtain it for you, or write for it, with pamphlet, etc., to

**ROBT. WIGHTMAN, DRUGGIST,**  
**OWEN SOUND, ONT**

Sole agent of the Dominion.

**HAY & PATON.**  
**KINNOUL PARK STOCK FARM,**  
**NEW LOWELL, ONT.**



BREEDERS AND IMPORTERS OF CHOICE

**ABERDEEN-ANGUS POLLS.**

We have reserved from the sale of our champion herd of Polls, some 17 excellent females, with that splendidly-bred Ruth bull, Runnymede and, at their head, and have started afresh to breed the comely doddie with individual merit (as before) the guiding star of our efforts. We are at present sold out, with the exception of two or three yearling bulls.

We have also a flock of over a hundred head of fine Shropshire sheep, the ram lambs and shearlings of which we have now for sale at reasonable prices. Send postal card for list and terms.

**HOLSTEIN-FRIESIANS.**

**SPRING BROOK STOCK FARM.**  
**A. C. HALLMAN & CO.,**  
**New Dundee, Waterloo Co., Ont.**



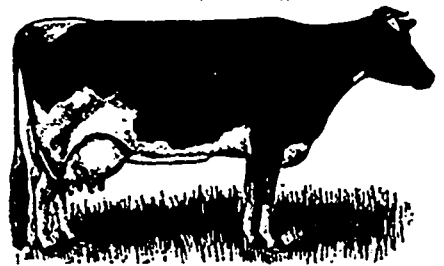
IMPORTERS AND BREEDERS OF  
**PURE-BRED, REGISTERED**

**HOLSTEIN-FRIESIAN CATTLE.**

The choicest and most uniform herd in Canada. Upwards of 40 head to select from. Only choice stock of highest milk and butter production selected from. Individual merit and pedigree a special object. Direct descendants of Aggie, Artis, Netherland, Johanna, and Lilly Hollyn.

Stock of all Ages and both Sexes for sale from above Families. Prices reasonable considering quality. Send for Catalogue.

**CREDIT VALLEY STOCK FARM.**  
**SMITH BROS.,**  
**CHURCHVILLE (Peel Co.), ONTARIO.**



(MINK 402 H.M.B.)

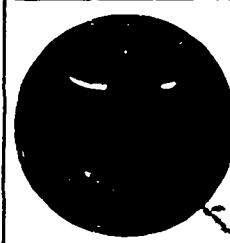
**THE GREAT BUTTER AND MILK HERD**

OF PURE-BRED REGISTERED  
**HOLSTEIN-FRIESIAN CATTLE.**

Most first prizes of any herd in Canada at Provincial and Industrial Exhibitions, 1885 and 1889.

Best strains, as Mercedes, Netherland, Clothilde, Artis, Wayne, Aggie, Mink, Siepkje, Tenen and Ykema, for sale. Particular attention paid to individual excellence and good breeding combined. Prices low for quality of stock and within range of all farmers. Send for catalogue.

**DEVONS.**



**W. J. RUDD,**

**EDEN MILLS P.O., Ont**

Breeder of Choice Devon Cattle. During the past five years, at the leading Exhibitions in Canada, my herd has stood first whenever shown, winning five Diplomas, one Gold, thirteen Silver and one Bronze Medal. Stock for sale including Berkshire Pigs, Cotswold Sheep, and Plymouth Rock Fowls.

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

AYRSHIRES.

**JAS. DRUMMOND,**

PETITE COTE, MONTREAL.

Importer and breeder of

PURE-BRED

**AYRSHIRE  
CATTLE**



Of Large Size, and from Choice Milking Strains.

The herd numbers sixty-five head, and for three years in succession has won Provincial or Dominion Prize as best milkers. The imported bull, ROY ROY (3071), at head of herd.

Young Stock on hand at all times for sale

HEREFORDS.

**HEREFORD AND ABERDEEN ANGUS  
BULLS AND HEIFERS.**

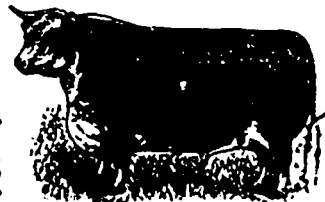
We have on hand for sale a number of Hereford Cows, Young Bulls and Heifers of the best of breeding. They are all from imported stock of the highest merit. The bulls are a robust, vigorous lot and cannot fail to get prime feeders. We also hold for sale a choice collection of young Aberdeen Angus Bulls from the best strains of the breed and they are all imported or from imported stock. A rare chance is afforded to get a superior sire of sturdy constitution.

Prices Reasonable and Animals Right.

**DAWES & CO.,  
LACHINE, QUE.,**

Importers of Herefords, Aberdeen Angus and Jersey Cattle.

**THE  
TUSHINGHAM  
HEREFORDS**



THIS herd is remarkable for the number and uniformity of the good calves that it produces. It has taken a 1 the Medals given in the Province of Quebec, at leading exhibitions the last three years. Breeders who are anxious to get bulls or females with plenty of hair and of good quality and good milk producers, should see this herd before purchasing elsewhere.

**J. WALTER M. VERNON,**

TUSHINGHAM HOUSE, Waterville, P. Q.  
Waterville is on the main line of G. T. R., 110 miles east of Montreal.

**THE PARK HERD OF HEREFORDS.**

This herd embraces over 60 Head of Choice Animals, All registered. Catalogues sent on application.

F. A. FLEMING,  
Weston, Co. York, Ont.

1/2 farm, half a mile from C. P. R. and G. T. R. Stations, eight miles from Toronto.

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

SHORTHORNS.

**BATES SHORTHORNS**

-AT-

**HAZELRIDGE FARM  
SANDWICH, ONT.**



THE undersigned desires to call the attention of Shorthorn Breeders to his very choice herd of finely-bred Bates Cattle, comprising the following well-known families, viz.: Duchess, Oxford, Thorndale Rose, Barrington, Kirklevington, Wild Eyes and Red Rose; headed by that grand imported bull, Grand Duke of Connaught (56103).

Several very choice young bulls of the above families, fit for service, for sale on reasonable terms. For particulars write to or call on

WM. WRIGHT, -or- WM. WRIGHT,  
347 Fort St. West, Detroit, Mich. Pettit Cote, Sandwich, Ont.

**BOW PARK HERD  
OF**



**PURE-BRED SHORTHORNS**

We have on hand eighteen young bulls fit for service, good animals and well bred, which we offer at reasonable prices and on liberal terms. Address,

JOHN HOPE, Manager,  
Bow Park, Brantford, Ont.

**"THE BRIARS,"  
Sutton West, Ont.**

Over 50 Head of Registered Shorthorns.

Including 12 bulls of various ages, incorporating the best blood of the Sittytton, Kinellar, and Killerby Herds. Also Horses and Pigs.

INSPECTION INVITED.

F. C. SIBBALD.

**Arthur Johnston  
GREENWOOD, ONT., CAN.**



Announces to his customers, and the public, that he is still doing business at the old stand, and has for sale the finest lot of young animals, of both sexes, ever offered by him. The yearlings of both sexes are exceedingly good—all by imported bulls, and mostly out of imported dams.

Intending exhibitors can be supplied with first-class show animals of either sex and of various ages. New catalogues will be ready by January 20th, 1890. Send for one.

Claremont Sta'n, C.P.R., or Pickering Sta'n, G.T.R.

Write or wire me, when and at which station to meet you. No business, no harm.

**CITY HOTEL  
State St Cor. 16th St. CHICAGO, ILL.**

Special Rate to Stockmen,  
\$1.50 per day

Within ten minutes ride by State St. or Wabash Ave. Cable Lines from Business Centre.

W. F. ORCUTT, Prop. FRED. MUELLER, Clerk.

SHORTHORNS.

**Belvedere Stock Farm!**

3 1/2 Miles from Alisa Craig on G.T.R. Line.



**We Breed:—PURE BATES SHORTHORNS,  
AND LEICESTER SHEEP.**

Our herd of Shorthorns is headed by Rosy Prince 6th, and it consists of the following families:—Cortauld, Tilly, Chesterfields, Berthas, Rosettes, and Darlington. We have for sale a choice lot of young bulls. Also a number of young heifers bred to Imported Duke of Salisbury, and they, like the bull, are descendants of good milking strains. Any person looking for stock is always welcome and will be met at depot if notice is given when they are coming. Prices and Terms Easy.

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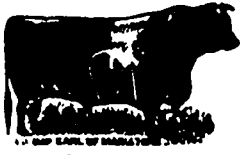
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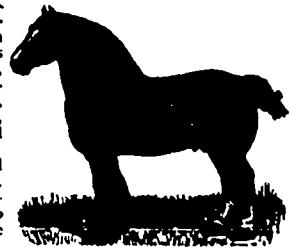
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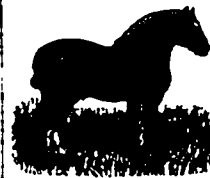


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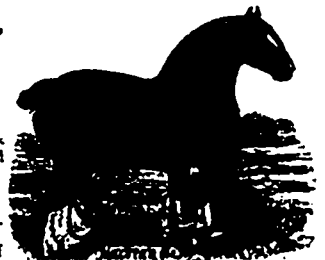
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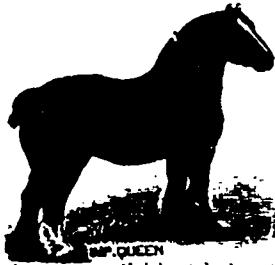
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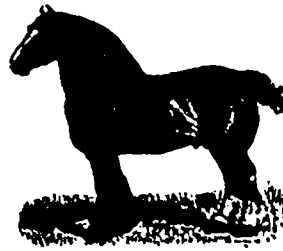
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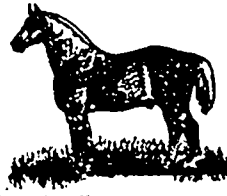


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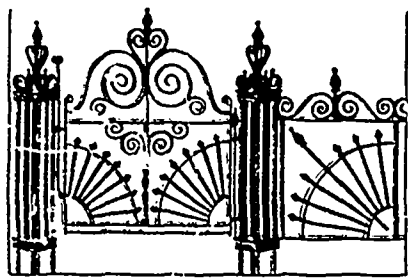
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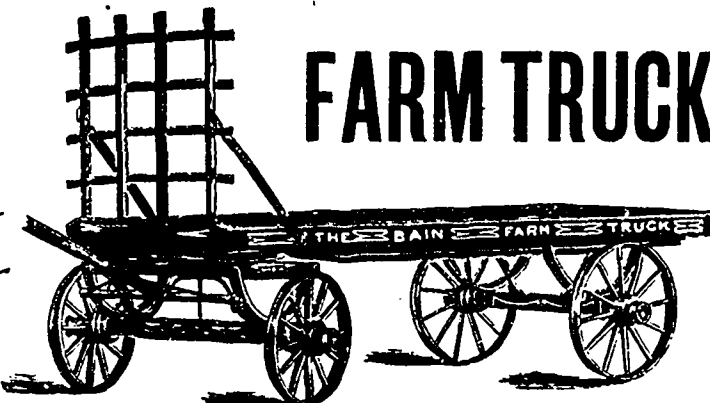
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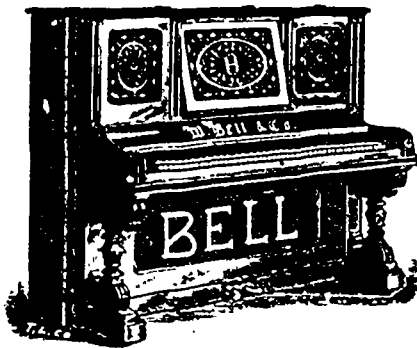
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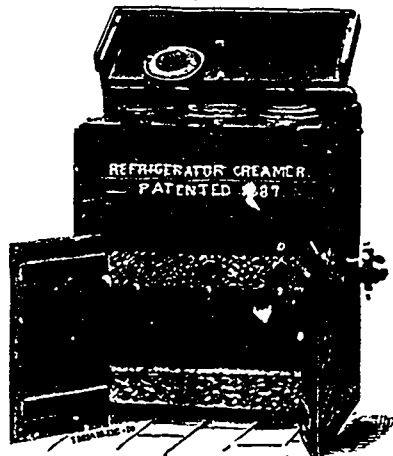
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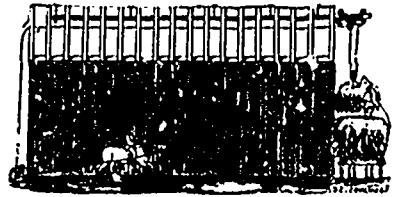
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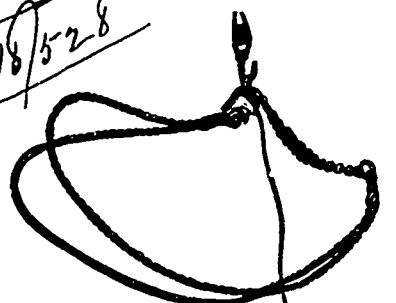
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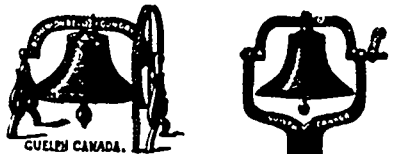


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