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THE ILLUSTRATED JOURNAL OF AGRICULTURE

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No. 4.

The Provincial Exhibition.—We call special attention to the advertisement we publish elsewhere respecting the Provincial Exhibition, to be held in Montreal from the 14th to the 24th of September next. Great efforts are being made to make this Exhibition as complete as any held in Canada so far. We hope that every one of our readers may do his best to cooperate to its success, both by exhibiting what he can, and by attending the fair with as many members of his family and friends, as he can.

All entries of stock, agricultural implements and dairy products must be made on or before the 4th of September. In manufactures, Fine Arts and Ladies work, entries must be in by the 28th of this month.

We notice with pleasure that an improvement is promised on previous exhibitions. Although all stock is admitted free, yet stabling, stalls, pens, &c. must be secured at the time of making the entries, and at the following rates: for each horse stall \$1; cattle stalls, each 50 cts.; sheep and pig pens, 25 cts. per head; poultry 25 cents per head.

Exhibitors will thereby be sure to command the best of stock accommodation, for the whole exhibition, and the public need not be sorely tried by the sight of innumerable empty stalls and pens.

Auction sales.—We call special attention to two auction sales of thorough bred stock to take place very soon and advertised in our last page. Farmers, breeders, and all desirous of obtaining first-class stock, should make it a point to be represented at these sales. The first will be held at Compton P. Q. on the 26th of the present month, on the excellently managed farm of John L. Gibb, member of the Council of Agriculture. The second, will take place at the *Ontario Experimental Farm at Guelph O.*, on the 10th of September next.

Agriculture in the Eastern Townships.

The most striking improvements have taken place in this division of our Province, since I saw it last. The whole style of farming seems to have undergone a transformation. Horses have taken the place of the loitering bullocks, and the rapidity of motion of the former has communicated itself to their drivers. And so with everything else; the use of improved implements, the amelioration of horned stock, the attempt, almost universal, to introduce a regular course of cropping, are evident throughout. I was enchanted, though surprised, to find that there was only one opinion as to the usefulness of the *Journal of Agriculture*. Where I dreaded to meet with sneers I met with hearty commendations, and I am happy to say that I have been promised the assistance in the future of several of the most successful agriculturists of the Province.

On the 28th of June I visited the farm of Mr. J. Browning, Longueuil, and a very pleasant day I spent with the proprietor, whose hospitality I have every reason to remember. Mr. Browning holds firmly to the notion that no farmer can possibly be thoroughly successful unless he keeps a perfectly accurate account, not only of his receipts and expenditure, but also of the work done, the manure spent, and the produce yielded, on each field. This notion I found, by inspection, he carries completely out; and the same with the dairy, poultry, and other parts of his business; so that it is visible, at even a cursory glance, what pays, and what does not pay. The cows are made up of Ayrshires and Jerseys; a good lot for dairy purposes they looked, and in splendid

condition. I was particularly struck with a two year old heifer of Mr. Stephens' blood, St. Lambert. Very different indeed from what I recollect years ago was she; certainly one third larger and heavier, but with all the points of Colonel le Couteur's old milking favourites fully developed. To accommodate these a thoroughbred Shorthorn bull is kept, and the cross, judging from what I saw of the young stock, is a very promising one. The bull at present in service is from Judge Dunkin, of Knowlton, whose herd is well known to all breeders in the province. He (the bull I mean) is a remarkably fine animal, with extraordinary loin, and a good rugged skin and hair, reminding me very much of the Duchesses, and an almost unfailing sign of a good constitution. (He partakes of the *Sweetmeat* and *Barrington* blood, and is the best animal of the later strain I ever saw.)

There must have been something peculiar in the spring of 1879. The seeds of that year failed here, as well as on many of the best cultivated farms I visited. A serious business, indeed, for it throws the whole course into confusion. I believe the season was dry, and probably the seed *chipped*, and was cut off in its infancy by the drought. I think, as a rule, we sow our seeds a little too shallow; they, like our grain, would benefit by a slight additional covering by the chain-harrow, or some similar implement, before rolling.

The hay crop was heavy, approaching two tons to the acre in most parts; oats good, but this is emphatically a hay farm, and Mr. Browning has the good sense to see it, and treats it accordingly. Three acres of Lucerne were looking well, though hardly as clean as could be wished. The land appeared dampish, which would hinder the durability of the stand, but the day was more than damp, and the dampness of the land may have been in my imagination, for the whole farm appears to be well drained.

The root crop, principally mangolds and sugar-beets, was looking well, but the soil was too lavishly sown and the thinning out seemed to be rather an arduous task in consequence.

As may well be conceived, Mr. Browning keeps nothing for show, the whole conduct of the farm is practical to a degree. Every thing is in its place, no tools or implements lying about, the barns, stables &c., all handy and convenient; consequently, the labour bill does not run away with the profits of the land, but is kept within due bounds. Now the principal improvements are finished an easier and more profitable task lies before the owner; at all events, seeing that it is only three years since he bought the estate, no one can doubt that genuine, honest work, guided by a sound head, has been brought to bear upon the land to bring it into the state of cultivation in which I found it.

On June 30th, after a pleasant journey on the *Vermont Central*, I arrived at Granby, and, after a short stay to inspect the principal beauties of the village, started for Abbotsford, in a buggy drawn by, perhaps, the worst horse,

which was driven by, certainly, the stupidest boy, it was ever my lot to meet with. He (the boy, not the horse) had only one idea; his master (*boss* was his expression) did not know how to feed horses, where as he, the boy, having passed a season at Boston, knew all about it; and yet this deplorably ignorant *boss* would not submit to be guided by the superior knowledge of his servant; to his infallible ruin, as the boy announced his intention of resigning his position at once, and asked me if I could find him another. I, unfortunately, was not acquainted with any one worthy of the services of so great a genius (he may have been thirteen years old), and parted with him at the door of my friend Mr. Charles Gibb, pondering the ultimate fate of so much early self-confidence.

July 1st.—Up at a very early hour, and into a fragrant, bracing air which soon dispelled all sense of weariness from me, alas! a dweller in cities for three years past.

The hay-harvest had been begun on the 24th, and the clover, which had been manipulated in accordance with my views, (v. June number of Journal), was in cock, sweet-smelling, green as when cut, and with all the leaves firmly adhering to the stem; worth, without doubt, twice as much as the wretched, sapless stuff one too often sees in the market of Montreal.

A great endeavour has been making here for some years past to arrive at a decision, sure and determinate, as to the most profitable kinds of fruit cultivable in this part of the Province. I was told by Mr. James Fiske, whose nursery is so well known to our readers, that, without the assistance of Mr. Gibb, comparatively no progress would have been made. The gentleman, it seems, has for the last few years devoted his energies, time, and means, to the development of fruit culture. Situated as his farm is at the foot of Yamaska Mountain (why have we not kept more of those Indian names instead of such wretched hybrids as *Georgeville*?) on a *stone-brash* soil: a finer site for orchard experiments would be difficult to find. The exposure, nearly South, is good, and the shelter from cutting winds nearly perfect. Seven acres of young thrifty apple-trees of all sorts, half an acre of pears, plums, and cherries, by their well grown tops bear witness to the attention show them in the early stages of their growth. The great drawback seems to be the danger of a too early flow of sap, arrested later by a return of cold weather.

The principal objects of cultivation at Abbotsford seem to be fruit, hay, butter, and honey. Mr. John Fiske's nursery is a model of good tillage and of careful work in general.

Experiments have been making here for several years on various kinds of apples, and the opinion seems to be that the Russian importations, particularly the *Duchess of Oldenburg*, *Tatofsky*, &c., are of great and permanent value. The *Duchess of Oldenburg*, Mr. Fiske informed me, will bear any amount of forcing, and pay for it. The great want is a good apple that will keep.

A curious incident, I was told, and I partly verified it, happened with respect to a Rougemont apple. Last year a single bud was taken from a tree that bore an enormous fruit, the origin of which was unknown, but it was a seedling. This bud was worked at Abbotsford, took, and is healthy and doing well. The parent stock, as I myself saw, is dead: this one tree, its infant, being the only scion of the parent stem in existence! Now if my friend was in the habit of wandering about with his eyes shut, this valuable *trouvaile* would have been inevitably missed. Fortunately, he is wide awake, and will, doubtless, watch carefully over the youngling which he has saved from so sad a fate. Regardless of grammar it is proposed to call it *Gros de Rougemont*, and I wish it good luck.

The *Ben Davis* is a favourite here, being a good fruiter and keeps well, but the flavour is only so so.

Of the pears, the *Flemish Beauty*, which I think we call in England *Beauté de Gand*, is a favourite, and so is the *Beurrie de l'Isle*, which I don't know by that name. It is not 30 years since it was always *Bury d'hiver*, *Bury de pâques*, with our gardeners, so the names are, at best, doubtful as to spelling.

I don't think it is quite fair of Mr. Cotton Fisko to keep so large a stock of bees. He has 85 colonies, and his brother tells me they choose all the smaller proprietors' bees out of their fair share of the pasturage! I hardly believed it, at first, but my incredulity ceased when I found that the rest of the people of the village had given up keeping bees! The usual yield of this apiary is about a ton a year, and very careful is the management to secure so good a result.

A prize is given at every meeting of the Royal Ag. Soc. in England to the man "who can, *without gloves or veil*, drive the bees out of their hive, catch the Queen, and transfer the swarm to a fresh hive, in the shortest time." Mr. Fiske and I tried the experiment we took the combs apart, drove out the bees, but could not catch the Queen. To my astonishment I did not get one sting.

Last year, one colony gave 100 lbs. of honey comb! I am not learned in bees, but this seems to me an enormous yield, and I fancy there must have been two families in one hive.

The grapes seem to be a failure, except (*horresco referens*) the Beaconsfield! Whether the rain and wind had driven off the blossom of the other sorts before they set, I know not; but, while they had only a few berries at irregular distances, the so-called Beaconsfield (it might be called by any other name and taste as well) was well furnished, and decidedly promising. It is a pity its flavour is so inferior, as in other points it is evidently a very valuable acquisition; perhaps this better season will improve it.

Mr. Gibb is trying conclusions with various sorts of forest and ornamental trees. Of the former (not that it is not beautiful as well, with its heart shaped leaves and lovely top) stands prominent the *Catalpa*, of which a notice appeared in the Journal for May. The *Copper Birch*, the *Silver Maple*, the various variegated foliage-trees, *Oaks* and *Cutleaved Maple*, are well represented in the *Arboretum*, which was not so clean as could be wished; but I saw the horse-hoe started in it before I left, and I dare say it will not be neglected again.

The land here is only moderately good—what I call, useful. The cows are a mixed lot, half-bred Ayrshires, principally, two or three decent Ayrshires, and the bull a good pure-bred of the Irving strain. The herd is kept entirely for a dry work, and is a fairly good one. I think I see a decided beginning of the end of all half-bred bulls, may half-bred mules of all sorts follow them quickly!

I observed a pile of compost making here which I cannot say I coveted. If the industrious farmer would keep as strict an account of the number of day's work of man and horse expended on it, and would use the same value in bones, I do not think, I am sure, he would ever make another compost heap. The case is very different, as we shall see after, where a tannery is at hand to supply the *nitrate of lime*; but *muck*, *bog earth*, or what ever you may call it is not worth two straws, except as an absorbent in the rear of the cowstalls, and even there its services are dearly bought if it does not lie handy.

No sheep kept here; but the time will come, when the lower slopes of all these hills (mountains if you like) will be grazed by sheep, which will be folded on the fallows at night, and do for Canada, what they have done for my own country, viz, restore the riches which the ignorant practices

of years have conveyed away; the hills shall be white with flocks, and, in consequence, the valleys shall rejoice and sing. From the starting point of my tour, at every point I touched at, to the last sight of Boucherville, the same phantom appeared; a ghostly shepherd of the future, leading an imaginary flock of Hampshire Downs from the fold to the hill, when the dew was off in the morning. I know it can't be done yet, the farms are too small. A flock without a man entirely devoted to its service is never successful, and less than 200 would not pay for a shepherd. But it will come. Soon, if the value of bones, rape, and the sheep's feet, to say nothing of its manure, were once fairly understood. I know I harp upon this string; but what says Macaulay: "They accuse me of repeating myself! perhaps I do, but I know no other way of impressing what I feel on other people's minds;" and I am as sure that Agriculture in Quebec must look to succeed for its future salvation, as Macaulay was sure that in *Whig* principles lay the safeguard of his country. Mr. Gibb has promised to pay particular attention to the early-cut clover, and to send me word whether the cattle and horses prefer it to Timothy however well made or not.

In the afternoon of the second day of my travels I was fortunate enough to fall in with a large party of farmers, who were celebrating Dominion day on Yamaska mountain. Several of them were good enough to accompany me to the Summit, whence a fine extensive view of the surrounding country detained us some time, and gave me an opportunity of delivering, under the guise of conversation, a few poor thoughts of mine on the subject of agriculture.

On the 2nd of July I started early for Rougemont, by way of the valley between the two mountains. This drive gave me a view of the rich heavy land through which the Yamaska flows. The farmers all are French, and I make them my compliments on the vast improvements visible on their property since I saw them last, about five years ago. They always looked well to the water-furrows and ditches, but their ploughing was defective, and the manure used to lie scattered about loosely all over the place. Now, I saw, on the farms of Messrs. Belisle, of the *Rang double*, Dupuis, of Abbotsford, Lavigne, Tremblay, Miché, of the *Rang de St. Ours*, ploughing that had been as skilfully executed as if a first rate Scotchman had been between the stils, and the crops bore witness thereto. The Barley was, even on the second day of July, in full ear, the grass was heavy, and the whole surface, as the eye travelled over the cropped land, was rich to view: all was well but one thing: the pasture. There was nothing to eat for the stock, and no provision made for their future, and as a long succession of bright, rainless days followed, I dread to think of the present state of the cattle. Fencing is expensive I know; but it would not cost a fortune to make, in the long winter days, a sufficient number of movable hindles to cross these narrow fields, and so to give a fresh bite from time to time to the stock, and a chance of re-covering (literally) to the grass. Herein lies the fault which, without exception, I found everywhere: the pastures are stocked, and both pastures and cattle are left to their own devices. In a dripping summer things go pretty well, but, if the grass once gets burned up, it never gets over it until autumn, and then the season of good grass is past, the herbage is *washy*, and the cattle enter their winter quarters with their bowels in a relaxed condition, and their constitutions weakened, and oblige their owners either to allow them to lose in the winter what they gained in the summer, or to keep them in fair order by an extravagant expenditure of costly food: extravagant expenditure, because a little foresight would have made it unnecessary.

What may be Mr. Whitfield's ultimate object in settling on

the lovely slope of Rougemont I am unable to say, for, unfortunately, he was not at home when I called, Mrs. Whitfield, who manages the farm during the proprietor's absence in Barbadoes, and with great skill, I am told, was also away. The Herdsman had gone to the pastures, at Ste. Marie de Monnoir, so altogether, I was left to pursue my own investigations unaided, except by the contractor who was putting up a new range of buildings, and who gave me all the information he could in a very obliging manner.

I was fairly puzzled; for in the first lot of loose boxes I entered I saw two Shorthorn bulls; then two Kerry bulls; then, two Devons bulls; then, two Jersey bulls; then, two Ayrshire bulls; and the new range is intended to be occupied by *twenty-four more bulls!!!* What are they to do, these lordly Sultans? It is true there are 90 cows in milk, and 1200 acres of land to feed them on. But think of 32 bulls: not calves and yearlings, but full grown animals! It is all a mystery to me. I have hardly recovered from the shock yet. Still, with the experience of Compton before me, it won't do to say the thing will be a failure; though at Compton the herd is all of one, or at most, of two breeds, and here there are already five, at least, provided. The 90 cows are of all sorts, I was told, but they were far off, and I did not see them. Of the bulls the older Kerry was the most perfect of its race I ever saw: lengthy, short-legged, square-framed, with good quality (feeding) and true colour. The young Devons was splendid, but the Shorthorns I did not think much of; too soda-water bottle like in form, and the colour too light to suit the present taste on this side of the Atlantic. Some malevolent beast had thrust a fork, or some other sharp instrument, into the testicle of the older animal, and if I were Mr. Whitfield, I would, on my return, administer the same correction that the late Lord Ducie gave to one of his cow-boys who caused the abortion of several of his best cows by means of the handle of a whip: I would thrash him within an inch of his life.

All the milk on this farm is used for the purpose of supplying butter to the large establishment carried on by Mr. Whitfield in the Island of Barbadoes, W. I., where no less than thirty-four clerks are employed. Why clerks I don't know, as they can't all be *writing*, and I should think our English word *shopmen* would be quite as euphonious, and much more correct.

The dairy is large and conveniently arranged, with a horse-power (sweep-motion) to work a large oscillating churn, with plain interior. The Cooley creamers are used, and are considered satisfactory. The butter is all packed in tins hermetically sealed, surrounded with ice, and forwarded to Barbadoes, via New-York.—Price, Retail, 60 cts. a pound.

I found the young stock looking in good, thrifty order. The early calves were as large and well-furnished as some yearlings. The yearlings had, evidently, suffered no privations during the winter; at the same time, they were not over done, or made up for show, but were just in the proper condition a farmer likes to see all his herd in.

The apple crop, at Rougemont, does not promise much this year; but my old friend Mr. Standish informed me that disease of the bark and the other ailments of this fruit are less injurious than formerly. The trees look healthy and thriving, and there are hardly any signs of the caterpillar.

I was rejoiced to hear, from so truly practical a man, that vast improvements have been made by the French-Canadians of the neighbourhood in their general system of farming. Most of them, notably a M. Sansfagon, having got rid of their old fashioned ploughs, are using the improved Scotch implement. The gentleman in question, with his son, won the first prizes at the ploughing match, last autumn, for men and boys. Now this is very-encouraging, and shows

how much good the example of one or two men like the brothers Standish may do in a district.

The old wild, hairy Canadian sheep, too, have vanished from the scene, and their place has been occupied by Cotswold and Leicesters. The cows are half-breeds of all kinds, and so, I am sorry to say, are the bulls; but, according to my informant, four times as many milch cows are kept, and the butter made by the *habitants* is, on the whole, of fair quality. As I can testify, by twenty years' experience of Mr. Standish's dairy, that he is a good judge, I suppose we may be satisfied that real progress has been made in this important matter.

I regret to say that the fences on the farms belonging to French-Canadians are not in a state to evoke praise from any one. I suspect, from the tone of my friend in replying to my question, he had suffered, and still suffers, from the encroachment of his neighbours' cattle.

A few pieces of fodder-corn along the road looked fair; generally the pease, though short in the straw, were healthy, but full of thistles, particularly in the neighbourhood of St. Césaire. Very little flax, but what there was looked well. I saw one piece of *Rye* on the sandy side of the mountain; poor enough it was, but what can you expect on such a soil without any preparation?

I don't think from what I saw I should feel much tempted to sow wheat on the upland. It is too hot and shattery for it. I observed almost all the barley was 4- or 6-rowed, the *bere* or *bigg* of Scotland. As an old Brewer, I have my own opinion of this grain, and, in spite of our neighbours of the States, I infinitely prefer, for malting purposes, the Chevalier 2-rowed. Mr. Standish, also an old Brewer, agrees with me in saying that 2½ to 3 gallons of beer more can be made out of a bushel of 2 rowed barley, than out of a bushel of 4 or 6-rowed. All it requires is great care in the malting (24 hours longer in the steep, and sprinkling on the floors) and moderate heats in the mash-tun. The colour of the beer must be paler, as the proportion of husk to flour is much less than in the *bere*.

As I write, a new number of the Agricultural Gazette informs me of a fresh importation of stock of all kinds expected from England by Mr. Whitfield; comprising polled Gallaways, Highlanders, (Kyloes), Ayrshires, and Herefords; besides a very choice selection of Aberdeen, or Angus, *Humties*, drawn chiefly from the celebrated herd of Sir G. Grant, of Ballindalloch. "Judge" (1150), the hero of the Paris exhibition of 1878, is at the head of this lot. Mr. Duckham, M. P., supplies four fine Herefords, and Mr. McGillivray, Docharn, completes the consignment with a small lot of carefully-selected ewes, and two fine rams, of the black-faced breed.

I own I could have wished a few Hampshire-Down ewes and rams from, say, Mr. Morrison's flock, had been added to the importations; and it would not have been amiss to have tried the large and early maturing Sussex race of cattle, as they are most popular with all classes: with breeders, graziers, and butchers.

Mr. Whitfield has now a collection of male animals that must go far to alter entirely, if properly made use of, the whole stock of the province. May I recommend Mr. Wother- spoon, of St. Anne's, to send his best Devon heifer, which I hope to see next week, to visit Mr. Whitfield's younger Devon bull, when the proper time arrives?

I don't think a better time could be chosen for making purchases of thorough-bred stock, in England, than the present. Prices are *very* low; good, useful animals can be picked up for a trifle, as the following list of sales at the Agricultural Hall, London, will show:

Bracelet 11th, 1st prize cow 25 guineas.
 Vesper (engraved in this Journal) 2nd prize
 cow, and 1st at Kilburn last year.... 25 "
 The best bull in the show—Duke of Dar-
 lington 4th., (39, 138), red, with very
 little white..... 35 "

Lord Oxford 7th, (38, 645), bought as a calf for 300 guineas, by Mr. Loney, and the sire of six 1st. (one of which took a special prize also), and of two 2nd prize animals at the Essex show, June 5th, 1880, only made 75 guineas. Such a felling off has not been heard of for many a long year, and it should be taken advantage of, if we really mean to share in the profits of supplying England with beef.

All through my journey, I observed that great complaints were making of the difficulty of getting grass land to hold out more than 3 years. The question is not easy of solution, but a few thoughts have occurred to me, which I will give in another page of this Journal.

Mr. Gibb had promised me an opportunity of burning a few loads of ashes on a clay soil, but was, unfortunately, unable to get a piece of land (there is of course none at Abbotsford) suited to the purpose. I hope for better luck next year, for I see that in England ashes have not yet grown out of favour, e. g. "Nothing can come up to ashes for clay lands. Rhuddlan Marsh is composed of strong plastic clay, and the effect of ashes, well burned, is something astonishing. Apart from their chemical properties, and power of absorbing ammonia (charcoal, it is said, will absorb 700 times its own volume of ammonia) their effect for an unlimited time, when ploughed in, in giving friability and lightness to the clay, is nothing short of marvellous. Farmers are, as a class, slow in moving, but if they read and observed more, they would find that many things that they disdain as having no manurial value are of infinite benefit to the land; and the chief of these are ashes." Ag. Gazette, June 21st, 1880.

The horse-hoe or scuffler is not used often enough in this district. It destroys weeds, of course, but it does more, it pulverises and refreshes the land, and should be kept going as long as it does not injure the tops. Potatoes are well managed, as to earthing up, not done too high, as in the French country, but broadly and flat-topped. It is only for the sake of keeping the tubers from the light that potatoes are earthed up at all, and as for early sorts, the bulk of which is never great, they are much better without it.

They don't place much confidence in the *Escutcheon* here. Like Mr. Drummond, they seem to think that cows properly treated, calved down early, and milked long during their heifer-hood, get into the habit of holding out their yield almost up to the time of calving; and I believe the opinion to be perfectly correct. What says the correspondent of the Ag. Gazette in his description of the Jerseys at the Bath and West of England show, June 3rd? "One of Mr. Simpson's men, showed us the particular turn of the hair on the thighs above the udder, which some deem essential as denoting milking properties in accordance with the so-called Escutcheon theory. More importance is attached to this theory abroad than in this country. We think it is by no means proved that it is anything but a fancied point of merit. A large experience of dairy cattle does *not* lead us to attach any value to it, though much to the shape of the udder." I read Mr. Guénon's book, while at Abbotsford, and I came to the conclusion that he was a charlatan. The orange tinge of the skin behind the ears and at the points of the hip and shoulder is a certain sign of a cow's milk being rich in cream; but that is a very different thing, and bears a *vrai-semblance* about it, which is wanting to the Escutcheon and the Milk-mirror.

The same paper confirms my statement as to the advantages of sheep on these light lands. "The altered appearance of a few dales (Cumberland) tells me there is nothing equal to trough-feeding sheep for making poor sandy hills grow grass."

There is a small piece of Prickly Comfrey here. It was, when I saw it, in full bloom, and covered the ground so that no particle of earth could be seen. The bulk of crop on an acre must be something prodigious. It was 4 feet, nearly, in height, and though past its best, the cattle of all kinds, after a trial or two, ate it voraciously. I recommend it for a trial on a moderate scale to every one; but I should begin to cut it the first time when youngish, as I found it, by personal mastication, when in that state to be juicy and tender, and when older the custom of eating it will have grown upon the animals. Mr. Gibb I think, will go into it, and Mr. William Hale, of Sherbrooke, has plenty of plants for sale, at one dollar a hundred. Its propagation is simple, as the merest bit of a root takes, and a couple of hundred plants would soon cover an acre. But like all other liberal-minded forage plants, it must be liberally treated, if it is expected to do much for its owner. The land should be well arranged deeply ploughed, harrowed, and rolled heavily, and the sets put on during showery weather, the earth being firmly pressed round them with the fingers. After the last cutting, a top-dressing of good dung will meet with a due return in the following spring. I should like to see it take the place of fodder corn. It is a perennial, and judging from what I saw at Abbotsford and Sherbrooke, the Oak and Elm are not more persistent in their attachment to the soil. Its bulky growth, too, makes it almost regardless of the heat; an additional recommendation, I need not say, for our climate. The proper distance for the sets is three feet apart, each way.

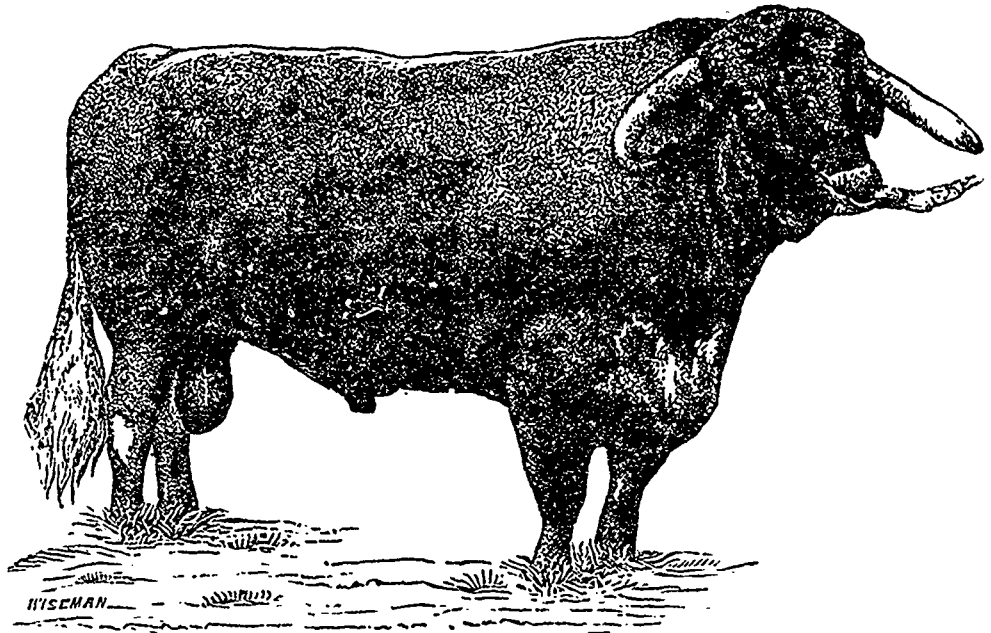
I don't know whether all the pupils (graduates?) of the Montreal Normal School are as lively and intelligent as the young lady who did me the honour to drive me from Abbotsford to Granby. If they, or even a fair percentage of them, are, the manners of the rising generation of the Townships will be a great improvement on the manners of their progenitors. The return journey was a pleasant contrast to my former dull experience with the stupid boy. I gained plenty of information from my companion, notably, that her brother had passed a winter at the Agricultural College at Guelph, where he had learned a great deal, and lamented sorely that, owing to the determination of the authorities to admit no more pupils from Quebec, he could not return to complete the course. There are nothing but praises of this institution, wherever I go, and regrets that we have nothing like it. Perhaps, in a few hundred years, when use and custom shall have made the discordant elements of our province homogeneous, we may hope to emulate the success of

our wiser brothers of Ontario. At present, it seems to me hopeless.

The farms on the bottom along the road from Abbotsford to Granby are sandy and swampy. They are only lately cleared, and the French-Canadians, who have done the work, must have some time to wait before their toil will meet with its due recompense. On the rising land, there are two or three fairish farms. One, the property of Mr. Ball, manufacturer of pumps, was pretty well cultivated, though there were more weeds, ox-eyes, charlock, &c., than one would like to see, and the potatoes were too late-planted.

A hopyard, near Abbotsford, on the first plateau of the mountain, looked healthy, but the bine was thin, showing want of manure, and the poles were of all heights, a sad error, and one prevalent throughout. Every hop requires a certain length of pole, from the Golding of 21 feet, to the Coldgate of 12 feet.

But I have not yet reached the Townships proper, so I must bid a regretful farewell to my charming *charrettière*, and start for Waterloo by the South-Eastern Railway.



Long-horned Bull.

Granby would probably, by this time, have been a large and flourishing place, had it not, more than once, been nearly destroyed by fire. As it is, the principal industry seems to be tanning; large quantities of Hemlock bark supplying the agent, and the river Yamaska supplying a fair amount of water power for driving the machinery. The hides are mostly imported from South America.

Wishing to see Mr. Blackwood, a member of the Council of Agriculture, and one of the committee of that body appointed to visit the Agricultural Colleges of the Province, I stopped at West Shefford, where that gentleman's estate lies. He was good enough to accompany me to Waterloo, where we arrived on Saturday, July 3rd, and from him I received much valuable information, given in a perfectly frank manner.

I am not much accustomed to "interviewing," but I gathered the following facts from my companion: as to the Colleges, he remarked, that at Richmond and L'Assomption, nothing had been done. The farms were not by any means in a proper condition, and he saw no prospects of any improvement. The College at L'Assomption had enjoyed the Government grant for a number of years, and up to the

present time it had been utterly wasted. As to Richmond, there had been a good deal of difficulty in its first steps: there had been an error in starting before the reception of the grant, and, in consequence they had lost their original farm and all their stock, and had to begin afresh. St. Anne de la Pocatière showed some signs of waking up; it had been asleep, like the rest, but, of late, there were some improvements visible, though nothing wonderful was to be seen, even now.

These are the opinions of Mr. Blackwood. I have, I believe, reproduced them with perfect exactitude, and certainly without addition. I have since seen a gentleman, closely connected with the Department of Agriculture, who has lately visited St. Anne's. He differs from Mr. Blackwood in his view of the question, and asserts plainly that St. Anne's is in no better position than the others. And, indeed, when we consider that the number of *genuine* farm students educated at St. Anne's has only been, on an average, $4\frac{1}{2}$ a year, it is not to be supposed that the liberal grant has been expended with much advantage to the community (1).

I fear, from what I have seen, that in too many instances lads have been enrolled in the list of the Agricultural students for the mere purpose of swelling the apparent numbers, and thereby constituting a claim on the Government for a renewal of the grant. I know of one case in which the attempt was made, but the Principal of the College alluded to happening to be a man of principle, the plan fell to the ground.

Now, as to my own favourite plan of Model farms, on which young men intending to live by farming should pass two or three years of quasi-apprenticeship, I am happy to say I found Mr. Blackwood in perfect accord with me. Generally I found, I might say universally, this idea favourably entertained throughout my tour. To some it appeared that the proposed aid of \$400 a year, for 3 years, was too much; but when it is considered that a great deal will be required of the farmer Tutor before he is intrusted with the diploma, so to speak, by the Government; that the land, buildings, roads, drainage, all will be expected to be in perfect order; when, again, the necessary calls upon his time in instructing his pupils, receiving, and answering the questions of visitors, official and otherwise, are considered, I cannot think that the proposed sum is at all exorbitant. Sure I am that in this way, and in this way alone, can the real practical part of farming be learned; and I am not without support in my opinion. If any one doubts the value of the plan, I beg to refer him to the first page of that absolutely invaluable work, *Stephen's Book of the Farm*, where he will find the question ably argued. I most earnestly advise all students of Agriculture upon entering upon their first year to buy, or borrow, a copy of the work. Reading it attentively and without prejudice, they will find it an immense assistance in making clear the many, at first, incomprehensible operations that are going on. They will see that, although the systems of agriculture pursued here and in Britain are necessarily different in degree, they are still based upon the same broad principles. That while climate prevents us from sowing the *Trifolium Incarnatum* on the stubbles in autumn, *Vetches* succeed perfectly when sown in the spring; though hoed root crops cannot be largely grown, Rape, Hungarian grass, &c., will supply a much felt want throughout the summer: in fact, that the grand thing wanted here is the sensible and discriminating adaptation of the practice of the old country to the rougher soil, and the harsher climate of the new country.

I can see wherever I go a spirit abroad which is very encouraging. A desire to learn, and absence of all contempt for new ideas. Young men of our best families, I speak of the English races particularly, are bent upon trying, at all

(1) Mr. Weld, Editor of the *Farmers' Advocate*, London, Ont, says the same.

events, if money, as well as comfort and a happy life, cannot be gained by farming.

Already, at Lennoxville, there is quite a colony of educated, men established, whose cattle and land promise soon to be an example to their old-fashioned neighbours. But of them more here after.

Mr. Blackwood's farm, he tells me, has been in his hands for 47 years! It was a roughish undertaking, but looking at the square forehead and the firm outlines of the mouth of the man, I could easily see that *difficulty* was, in his vocabulary, only another word for *something to be overcome*.

He never rested till he had brought his whole farm, hill-side of course excepted, into a regular course of cropping, feeling, as every one must who thinks at all, that no certainty can exist as to the quantity of stock that can be kept, unless the acreage in stock food is a fixed quantity. He lays down no hard and fast rule as to the proper course of cropping: that must depend upon the soil, distance from manure, &c.

He milks about 30 cross-bred cows, and has a high reputation for butter in the neighbourhood. I fancy there is not much waste about his place; a man evidently keen, and one who reminds me very much of the late Mr. Howe, of Nova Scotia, in fact I never saw two heads so much alike. I never saw the later gentleman but once, at the St. Lawrence Hall, Montreal, but I was so much struck with the look of *sagacity* (sense and judgment combined) that I enquired his name, and was not displeased to find that my taste for physiognomy had not led me into error.

I regretted very much not to have had an opportunity of seeing Mr. Blackwood's farm; but I could not retrace my steps, as my time was limited.

The country round Waterloo is evidently given up to dairying. The land is strong, terribly stony, and a man ought to be brought up in the district to enjoy farming there.

There is much *good* land in the intervals (*inter valles*), and all of it is *useful* land, that is, land which, properly treated, will grow any crop you like to ask it to grow.

I visited, first, the farm of Mr. Keep, pleasantly situated on the hill above the town. It has only been in its present owner's hands about a year, but he has worked hard, and although much of it had been evidently run out, one or two pieces of grain, and a small piece of Mangolds showed that business was meant. The hay was promising about a ton and a quarter to the acre; good for such a bleak place. Indian Corn was cut about by the wind. Wheat last year, 22 bushels per acre. Twelve cross-bred cows are kept, and the butter was selling for 19c. a pound. This farm bids fair to be one of the best managed in the district; but, until the stones are cleared off the land, it will never be a pleasant one to till. If Mr. Keep continues as he has begun, it will not take long to rid him of these hindrances.

The implements used here are necessarily of the strongest description. No reapers, and the Horse-rakes and mowers preferred are from the manufactory of Messrs. Massey, of Toronto.

A meadow, 33 acres in extent, belonging to the Hon. J. Steevens, Senator of the Dominion, deserves more than a passing notice. Bought about ten years ago, the land was mere swamp, and the produce, Mr. Blackwood informed me, was a quarter of a ton per acre. The whole was drained, with stones, at the depth of 30 to 36 inches, and top-dressed with manure from the town of Waterloo. The yield has, since, been enormous. It is said that 110 tons have been taken from the 33 acres, $3\frac{1}{2}$ tons to the acre, but this I found to be doubtful, as Mr. Williams, a nephew of Mr. Steevens, put it at 90 tons, and as the hay was not weighed but judged, even this yield is not an ascertained one. Still the crop as I saw it was very large; considerably more than two tons to the acre. Mr. Steevens I did not see, as he was

out every time I called, but I found, from Mr. Witcombe, that the manure used was principally Tanners' refuse, composed of bits of skin and flesh, lime, and wood-ashes. What more would you have to form a perfect manure for every crop? Nitrogen, sulphur, and phosphoric acid, in the skin and flesh; lime, and potash in the ashes. No wonder the land is in such good fettle! I remember well, in 1870, using this refuse for tobacco and cabbages in alternate rows, and well it repaid me for the cartage, which was all it cost me. The best way to use it is to thoroughly mix one load of the stuff with two loads of earth, turn over the heap in three weeks, sprinkling each layer with water, and repeat the operation a month or so afterward. If there are not many ashes, the proportion of earth may be as 3 to 1. At the end of the summer the whole will be found to be in a state of

its velocity. Feeders should be from 30 ft. to 40 ft. apart according to the fall.

The chief things to be observed are: never to allow water to stagnate; to let it flow in spring as soon as frost departs; to keep it on from 10 to 15 days at once; to let the land dry before irrigating again; and to shut it off before hard frost sets in in October, say about the 20th.

Neighbour to Mr. Keep is Major Witcombe. He has lived and farmed on the same spot for 42 years, and has brought his land into a very excellent state of cultivation. Potatoes and Corn here look well, but Mr. Witcombe agrees with me, I was glad to see, that it is waste of time, labour, and manure, to grow Corn in this province, as it can be bought cheaper from the States, and he is far too sensible a man to imagine that a farmer should grow all he consumes on the land, when he can buy the same things at a more advantageous rate of the foreigner.

A slight dose of political economy coupled with a little thought would soon knock this ridiculous nonsense on the head. Take one instance: the county of Norfolk, Eng., grows first-rate maling barley; do you suppose the farmers are fools enough to sow oats for their horses? By no means: they sell their barley, and buy Russian oats.

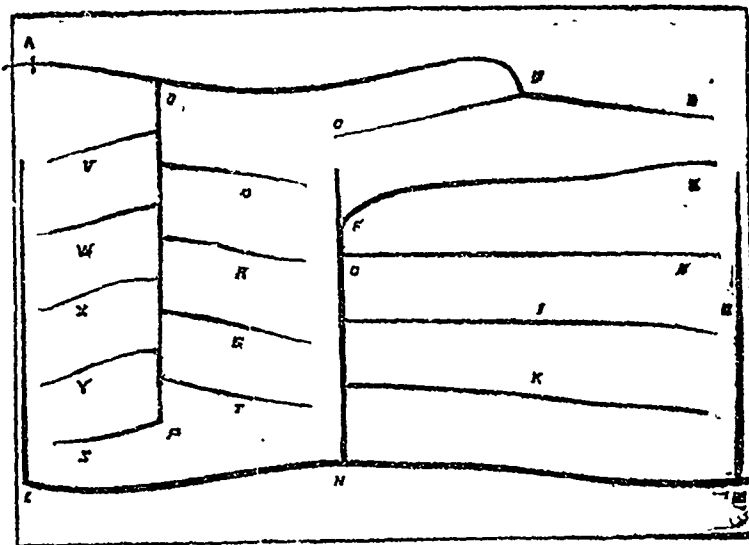
The Indian Corn is sown on shares by a neighbour, and as the land is well tilled and hoed, Mr. Witcombe does not object to the crop, but a piece of Swedes, or Mangolds, would cost no more, and as the average crop of corn is 30 bushels, and of Swedes 15 tons or 600 bushels, it is evident that the latter is the more profitable of the two, for no one will deny that 20 bushels of Swedes are worth more than one bushel of corn, and the tops of the one given with plenty of dry food are certainly worth the stalks of the other; to a dairy farmer at any rate.

Here are 33 milch-cows, principally half-bred Devons. Mr. Witcombe has a high opinion of this breed. He says they are hardy and sure breeders, whilst the milk, which from time to time he carefully weighs, produces, on an average, one lb. of butter to 20 pounds of milk! This is the greatest yield I have met with on my tour, but it must be observed that the pastures here are very sound and healthy, and the whole dairy management first-rate. The churn, an old-fashioned plunger, is worked by horse-power, and the milk is set in open pans, surrounded by iced water.

The farm consists of about 250 acres, cleared, and the hay-crop looks like 1½ tons all over. Last year's wheat crop turned out 30 bushels an acre! A fine yield indeed, but I think it will be exceeded this year, if no accident happens.

But the great attraction on this estate is the new barn. Men who understand building much better than I do, (that is not difficult) assure me that in no instance have they ever seen so much room, easiness of work, and convenience for both men and animals, furnished at so slight a cost. To me it seems a model of constructive skill; and, though no judge of prices, I can see that no material has been wasted in its erection. Large stones have been sunk into the ground on which the enormous posts which support the frame rest. The frost has had no effect on its level, all stands firm and upright. The interior is 100 ft. long, by 32 ft. wide, and 24 feet to the eaves. As the approach is by a raised causeway of 1 in 5, the heaviest load can be carried in without trouble, and very little pitching up is necessary.

Mr. Blackwood begged me to notice this structure particularly; he conceives, and I think rightly, that it should serve as a model to the farmers of the French country whose



A catch-work water-meadow.

meal, and can be easily spread out of a cart at the rate of six loads to the acre.

After the experience of Mr. Steevons, I hope nobody will be found to deny the possibility of working miracles in agriculture. If there be any so dense, he will meet with little sympathy at Waterloo, for there the towsmen seem singularly without prejudice, and appear to rejoice in the successful issue of their energetic fellow-citizen's undertaking.

We have now got into the heart of the Townships proper. A lovely country, full of streams, small lakes, and with numerous springs, most of which are utilised to supply the stables and yards with the purest of water. Many an irrigated meadow might be formed at a trifling expense, but the art is unknown here, and unless some Devon or Cornish men settle in the district will, I fear, remain unknown. The catch-work water meadow is easily formed with the plough, and perhaps a little spade work, as will be seen by the annexed skotch, where *a b*, is a main conductor, the curved line of which is supposed to be caused by various irregularities in the fall; the level of the land must be preserved.

At *b* the water should flow along the feeders *b c* and *b d*. Overflowing here it finds its way into *e f*, which, when full, sends its water on again to *h g*, and so on to *i* and *k*, until at last the main drain *m* carries off the whole into the parent stream at a lower level. The sub-conductor's office *o p* will be easily understood. The feeders may be three inches deep, and four wide.

If the water flow unqually, stops, stones, bits of turf, or anything of the sort, should be placed in the feeders to retard

barns are seldom conveniently built. I only wish I could give a better description of it, but I am not skilled in building; Mr Witcombe however is perfectly willing to show his barn to any visitor who may wish to inspect it, and will, I know give any explanation as to its construction that may be desired.

Every body was busy with the hay on the 5th. They tell me they cut it now at least a fortnight earlier than was their custom 10 years ago. At all events, I don't wish to see anything got into *barn* fresher and greener than what I saw carried to day; it was made a little more than would be necessary for a *stack*, but it was fair enough. This reminds me that Mr. Barnard, Director of Agriculture, has, at Varennes, made a couple of hay stacks. He tells me he carried the hay in good order, and greener than he could have safely entrusted it to the barn.

It is going on I am sure, the improvement I mean. Ten years ago a man would have been laughed at who cut Timothy before the seed was formed. Now, what a difference! Well, we may thank the Agricultural papers for it. The Country

wanted. I fancy all the best mares have been sold across the border, and only the refuse retained.

The cows of the district of Waterloo are mostly cross bred, useful animals enough. The Bulls, I am sorry to say, are cross-bred also; consequently no improvement is likely to take place in the stock. I saw very few sheep, which I thought strange, as every farmer I spoke to on the subject seemed to think that they were the most profitable of all things. It will not do any longer, with the English market open to us, to look upon sheep as the scavengers of the farm, that is, to keep only as many as will eat up the refuse of other animals, and keep down the weeds and rubbish round the fences. I almost extorted a promise from two of my friends to try fattening a hundred ewes and their lambs on rape, with a little corn or cake in troughs, next summer. Ten acres, properly done, would make the lot ripe fat by the end of October, the lambs might be drawn for market from time to time, the expense for movable hurdles would be a mere trifle, and the land would be in a fit state to bear crops such as have never been seen in the province. The seed, 7 lb.

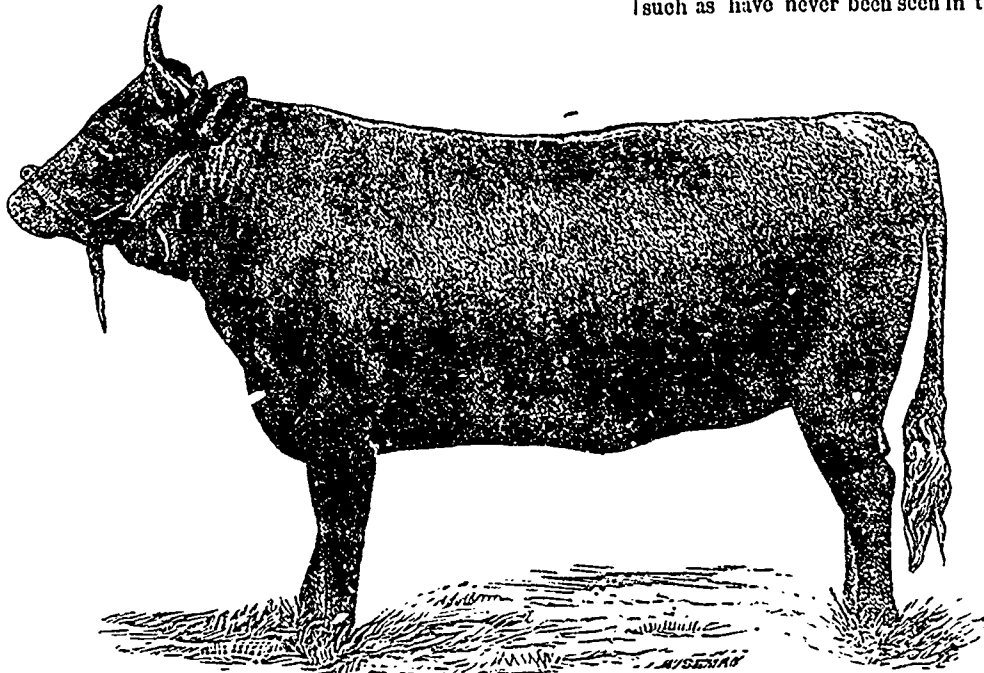
r 8 lb. per acre, should be sown broadcast at 3 times, with intervals of 2 weeks, from the middle of May, and the first lot would be fit to stock about the last week in June. Ten bushels of bone dust, or a mere half dressing of dung, will produce a full crop on land in fair heart. The lambs should be allowed to run forward through holes left purposely in the hurdles. The corn 1 lb. a day per couple, is by no means necessary, but the expenditure say \$150 would be well repaid both by the sheep and by the land.

If I am not very much mistaken, Mr. Crowhurst, a Waterloo butcher, whose farm is just beyond Frost Village, is a Sussex man; at least I never heard of a Crowhurst who did not come from that county. If

he is, he will be able to give information to any one about this wonder-working plant, and the method of hurdling sheep on it. I was not lucky enough to find Mr. Crowhurst at home, but I saw his farm, which looked full of condition, with one of the best pieces of oats I have seen this season on it, and 30 or 40 good sheep feeding on the upland.

On July 6th I left Waterloo for Knowlton. My companion, the son of Mr. Brooks of the hotel at Waterloo, I found full of information, and willing to impart it. He told me that wages for the hay month were about \$24 to \$26, with board, but that men were asking in some parts as high as \$36, many having emigrated to the States. I found a great discrepancy in the rate of pay, at Lennoxville \$20 to \$24, at Sherbrooke \$18 to \$20, &c. This difference should not exist in a country where the means of transit are so handy.

About 2 miles from Brome Lake, I was roused from a deep meditation on sheep, and their strange absence from the scene, by the sight of a piece of clover aftermath at least 10 inches high! "Halloa!" said I to my driver. "Whose can this be?" He did not know, but seeing a man in a



Devon Heifer.

Gentleman and others have been insisting on this change for years, and first one tries the plan, then another, until at last the practice of a whole country-side is totally changed, to the lasting benefit of the entire province.

I cannot say much in praise of the horses at Waterloo. Partial friends credit me with knowing the animal pretty well, and, if I do, I say that weedy, light, *gig-horses*, are not in their place on a farm. Weight, and not muscle alone, is the force by which plough and cart should be drawn. Pace is not desirable in the plough chains. The more slowly, in moderation, the implement is drawn along, the better can the man between the stilts direct the share and shape the furrow. It would make me laugh, were it not so sad, to hear men boasting of having ploughed $2\frac{1}{2}$, even 3 acres a day! We know that one acre well ploughed is a fair day's work for a pair of horses anywhere, and though in the long summer days more may be got over, yet neither man and horses are the better for it. It does not pay to over-work oneself or one's beasts.

The hocks of the horses here demand attention. Three out of four are *cow-hocked*, and a change of blood is sadly

straw-hat, which effectually concealed his features, turning some hay, I called to him, and for answer was astonished to hear, "I'll tell you all about it. Mr. Jenner Fust, if you'll wait till I can get up to you!" It was Mr. Sydney Fisher himself, whom I had come to visit, and I was rather glad that my enthusiasm had manifested itself before I knew to whom the clover belonged. I found that here every one held the right opinion: clover cut green is preferred by stook of all sorts to every other description of hay. Mr. Williams, Brome Lake side, told me that, in 1879, he cut some very early, and all his animals refused the best Timothy for its sake. I hope this question is now settled, for it must be accepted as an axiom, after all these trials, that clover should be cut before even the whole is in bloom, turned once, put into cock, and carried thence, to the stack preferably, if not, to the barn; but at all events that, if possible, it should not be stirred at all after once being in cock, for it is at that time the leaf is beaten off and lost.

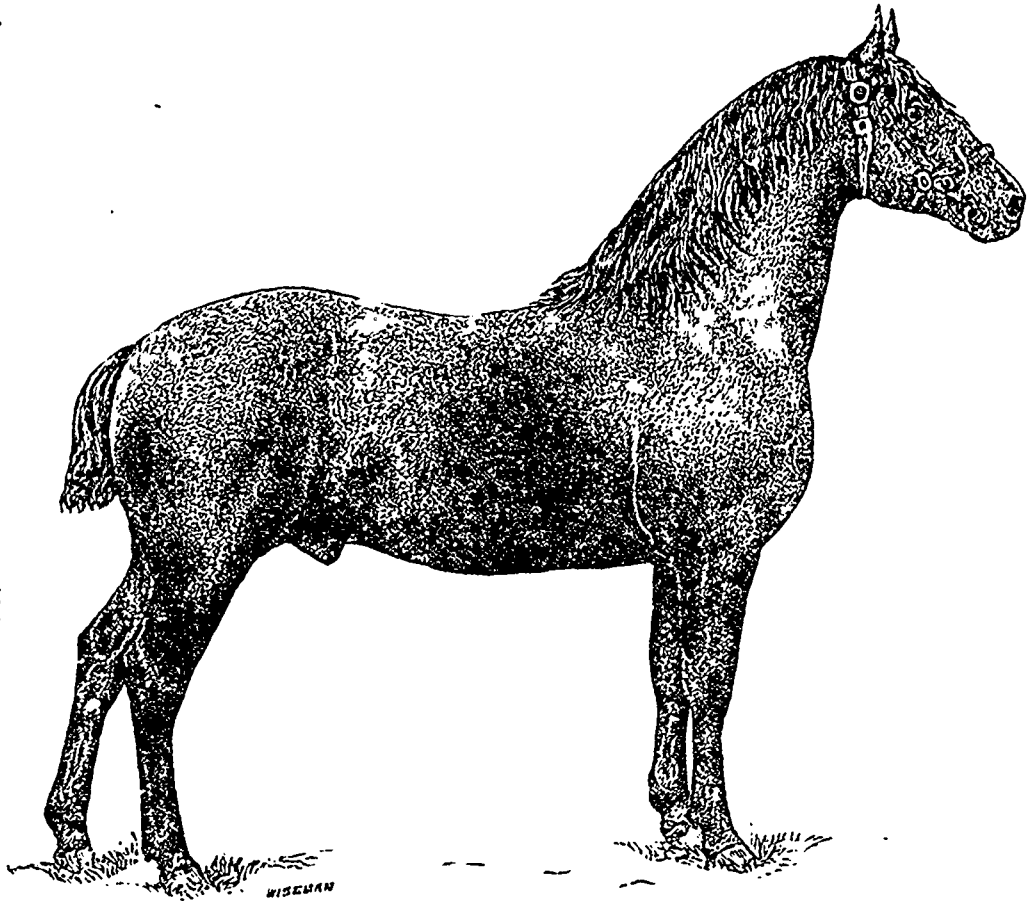
Mr. Fisher's farm lies on the road from Waterloo to Knowlton. The house, a new building, is most commodiously planned and the grounds are laid out with much taste and skill.

Now, it is something new, in this country at least, to see a young man of education and means, one who has had the advantage of foreign travel, to say nothing of 3½ years at the University of Cambridge, devoting himself to the cultivation of the soil. It is not playing at farming, at all, that Mr. Fisher contemplates. He is up early, and down early too, or else the candle, burning at both ends, would not last long.

There is no show here; all is ship-shape, the barns, yards, &c., are in good form, but not fancifully ornate. The cows are half-bred Ayrshire, the Bull Jersey, and useful animals for dairy purposes I should think, this being Mr. Fisher's principal object. The milk cellar was exquisitely clean; this I must say is the invariable case throughout the Townships. During the months of July and August, the Cooley Creamer is used; at other times the milk is set in old fashioned shallow pans, as experience shows that more butter is made in this way than by deep-setting. It may be so; but the opinion of practical men is to the contrary. Cooley's arrangement I don't like myself. I prefer a perforated cover, like the Aylmer tank; but, anyhow, the deep-setting ice-pail system is stamped with the approval of both practical and theoretical men, and I think it would be a retrograde movement much to be deplored if it were to be given up.

The butter, I think, would be purer-flavoured, i. e. the animal odour would have a greater chance of escape, if the milk were exposed to the air for some time before putting the tops on the cans. But if any thing is certain, it is that setting milk for twenty four hours to turn sour before it is skimmed is a thing of the past.

Mr. Fisher's barley is a full crop all over. His oats, particularly an acre of *Australian* oats, which, from the description I heard of them, are only the old *White Tartars* under a new name, are very heavy; some part, I should think, would lodge before harvest. These Tartars weighed 42 lbs. per bushel; a heavy weight indeed, for with us, in the South of England, they rarely go over 38 lbs. Why on earth they should be called *Australian* I don't see. Perhaps from a prejudice I found existing at Richmond, that horses



Hackney Stallion.

would not eat *Black Tartars*; a prejudice that would make my old friend John Day, the trainer at Danbury, laugh consumedly, seeing that he, Mat. Dawson, Scott, and the other horse-men at Newmarket, &c., never use any other oats than *Black Tartarians* as long as they can get them. It would be well to recollect that there only two sorts of oats which bear the *panicles* all on the same side of the *rachis*, the *black* and *white Tartars*. Of the latter, my friend Mr. Rigden of Hove, Sussex, grew, in 1849, the enormous number of 420 bushels on 3 acres of land! They went down of course, and only weighed 33 lbs. to the bushel, but think of 140 bushels to the acre, 4620 lbs.!

Mr. Fisher's root crops were looking well; there are about 5 acres of them. Potatoes about here yield from 150 to 200 bushels per acre; but I was told that Mr. Williams had grown as much as 400 bushels per acre. This is a real crop,

but there is no reason why it should not be frequently equalled. All land won't give it; but there are thousands of acres, which, properly cultivated, the sets being planted at the proper distance apart, would yield an approximation to this crop of Knowlton. Down in the bottom, past the village, are two or three very superior farms. Mr. Williams, of whom I have just spoken, has 200 acres of land, some of which is *intervale* of the richest description. On this, 100 acres in extent, are nearly 2 tons of hay to the acre. A mill dam has lately been destroyed at the outlet of Brome Lake. This has lowered the water-level on the interval about 4 ft., and allows the small stream which flows through the flat to act as the drain of the whole, adding enormously, not only to the quantity of the grass but also to the quality. There was, in parts, Timothy 3 ft. and upwards, where formerly nothing but aquatic plants stood. Mr. Williams has only just bought the farm. It will, I am sure, improve vastly under his management; but although he will run Mr. Fisher pretty hard for the prize for the best oats, I think, bar heavy storms, that the latter will beat him.

Mr. Sewell Foster's farm looks as if the subsoil were a hot one. This grass wanted cutting badly. Nothing could be better than this gentleman's barns, and the manure was really quite a tasteful sight, as it lay rotting in well shaped cubical heaps near the stables.

A promising, though late, piece of Swedes struck me, as being the first I had seen sown on the flat. It had been, I fear, treated in that fashion, solely because it was on the back of a lea of some sort; probably the seeds had failed. That is not the proper place for turnips, and the expense of cleaning these Swedes will teach the farmer a lesson which I hope he will remember.

Mr. Justice Dunkin's farm is a hilly one, and reminded me, only there were no flints, of many parts of my own country. I almost expected to see a Kentish turn-wrest plough crossing the slopes. I am sure a side-hill plough of some sort should be used here, not only to lighten the horse's labour, but to counter act the tendency of the land to wash down to the bottoms. I recommend this to the thoughtful consideration of such men as the Judge; as where they lead others will follow.

Mr. Dunkin's Shorthorns have been too long known in the province to need much notice at my hand. A heifer calf by Prince Albert from the stock of Sweetmeat, Barrington, &c., will probably make her mark at the county show in the Autumn. The bull at present in service had been unfortunately turned out to graze with the cows; an indignity which resenting, he turned sulky, and, doubtless from the natural gallantry of all Shorthorn bulls, refused to feed: consequently he presented by no means an agreeable spectacle.

Two mules are kept, besides horses; hardy useful animals, I dare say, but with no weight about them, and anything but pleasant to manage.

The stables, barn, &c., are well arranged, there is water led into every conceivable nook and cranny. The judge was evidently very unwell, so I did not have much chance of imbibing that information which, from his vast experience of the country, he must be most capable of importing. The Wheat was looking very well, and, being in full bloom must be considered an early crop. The small vineyard enjoys a perfect exposure: if grapes don't ripen on those vines it must be a hopeless task to ripen them anywhere else in the province.

On the 8th of July, I left Knowlton for Stanstead, via Bolton Pass, Georgeville, Fitch's Bay, and Smith's Mills. Had I time and space, I should like to expatiate on the beauties of lake Memphre Magog, and the wild scenery of the source of the Mississquoi River. But the picturesque is

not my present subject; it is more to the point to say that all through the rough country among the hills every available bit of land seems to be cultivated, and some of it is really well done. Good rough half-bred cattle are kept, and they look in fair condition. Very few sheep, alas! in a true sheep country. I don't think Bolton Springs, as a watering place, will ever equal Cheltenham, or Leamington Spa; but no great outlay has been made, and that is something, when the horrible unfinished hotel at Gibraltar Point, on the Lake, is standing, surrounded by those empty cottages, as a warning not to be seduced into beginning to build (Sam Weller calls it "delicate English for going mad") without knowing how to finish.

A well-bred pair of Shorthorn steers at the ferry showed how, even on rough land, blood will tell. They belonged, I was told to a Mr. Folsom, and sprang from Judge Dunkin's stock. I learn that root crops are gaining in favour here: 100 lbs. of seed are sown where only 5 lbs. used to be. But I found them, as a rule, backward. Mangolds ought to be in the ground at the latest on the 20th. of May, and Swedes should follow. Often the fly (*Haltica nemorum*) spares the early ones; but even if they are taken others can be sown in their place.

From Georgeville to Stanstead Junction was a weary drive of 12 miles; it took 4 hours to do. Good farms, however, all along the road, Cattle, principally crosses of all sorts. Mr. Selah Daly seems to have a mixed herd of Herefords and Devons. Mr. Tuck's yearlings were good, and showed an improvement in the treatment as calves, unmistakable to the eye of an observer. The best cows I saw were the property of a Mr. Dolloff (I made my driver spell the name, as it was quite new to me). Judging from the family likeness that ran through them all, I should say that their owner took real pains with his cattle, but was a little too fond of breeding from his own stock. A pure-bred Shorthorn bull would do wonders for him in a few years, and his land is quite good enough to keep the progeny well.

Hay looked well throughout, but I could have wished the weeds less abundant in the grair. I fancy, too, the quantity of seed sown might be increased with advantage; I never saw much of a crop with less than 4 bushels of oats to the acre. Talking of oats, I see that, in 1878, the Reading sewage farm gave, on 11 acres, 120 bushels and 2 tons of straw to the acre. Their Mangolds 102 tons (on one acre only) leaves and roots, and 90 tons of trimmed roots, all over!

I had the pleasure of a chat with two very intelligent farmers, Messrs. Clarke and Christie, at Applegrove. They seemed to think that great improvements had taken place of late years in their neighbourhood. They spoke most favourably of this Journal, and particularly of Mr. McEachran's veterinary articles, and of others which *modesty forbids me* to particularize. That it was very pleasant hearing for me I need not say.

From their account there seems to have been some quarrel in the Stanstead Agricultural Society, in connection with a donation, or legacy, made by the late Mr. Carlos Pierce, for the purpose of building an Exhibition stand for the county. This has been removed from Stanstead to Ayer's Flat, and, in consequence, many members have left the Society. A sad pity, for even Stanstead, the garden of the Eastern Townships, as it may fairly be called, cannot afford to alienate any of her sons. I hope means may be found to arrange this little disturbance; and I would suggest to my friend Mr. Albert Ball that he could not well use his necessarily great influence better, than by allaying the bitterness of feeling that has arisen from what, after all, is only the jealousy of a few individuals.

As there appeared to be three Stansteads, viz Stanstead

Plain, Rock Island, and Derby Line, I naturally applied to the Conductor of the Junction line for information as to hotels &c. He would not give me any, but was as perfectly rough and ill-bred as any *borderer* I ever saw. This was the only approach to incivility I met with in my whole tour. Many were brusque in manner, but every one assisted me in my investigations with kindness and frankness, although it was a busy time with them.

Stanstead is superb! By far the finest spot for farming as for beauty in the whole province. Everything was in first-rate condition; cattle, horses, all larger than elsewhere, and, as a whole, better bred. The influence of the late Carlos Pierce still survives, and there is a general rich look about the place which is rare to see, in spite of the decadence of the manufactories on the little stream that tumbles down its rocky bed, serpentine its way through the village down to the flat, affording many an opportunity, unused I am sorry to say, for the formation of acres of valuable irrigated meadows.

There has been no emigration from Stanstead to the States this summer. Why, I don't know, but so it is. There are, I should think, judging from what I saw, a good many people of easy means in the village. A considerable number of *loafers* too, more than I saw anywhere else in my journey. There must be something peculiar in the formation of the floor of the hotels between the "stoop" and the bar-room; for I remarked that, although very much travelled, the effect seemed to be not on the boards, but on the soles of the travellers, and those who passed to and fro most frequently had a proportionate number of holes in their boots. I am not a tea-totaller, but there seems to be a good deal too much drinking here, and of course its usual concomitant, idleness, is not wanting. I am told that at one time no less than eleven coaches passed through Stanstead, daily! This lounging habit derives no doubt from those times; it is, or was, quite observable in England, wherever old posting-houses, or places where coaches changed horses, were done up by the railroads.

A delightful farm is Mr. Ball's (Manager of the Eastern Townships' Bank). He told me he was not a practical farmer, though he wished to be. He was a very good imitation of one, at all events. The hay-crop was very heavy, 2 tons all round I should say; and, mind, two tons are more often talked about than got. Oats heavy, though rather late, as is all the grain in the Townships. Here is a fine herd of Ayrshires, which are well known far away from Stanstead, and some of which I hope to see again in September, at Mile End.

Two or three miles beyond Mr. Ball's farm, lies, back in the woods, that of Mr. J. Borland. Now, here is a thoroughly practical man who, once a labourer, has in ten years raised himself by degrees into the position of a farmer with a valuable estate of 200 cleared acres. Mr. Borland has five pupils, young men learning agriculture, all from Montreal. His object seems to be, (the prevailing idea here,) to keep his land in grass as long as it will grow any. He seeds down with various grasses, of which I could distinguish some of the *fescues*, red top, blue grass, and the clovers. But the whole farm seems to me to be nearly run out, and the owner will have hard work to bring it round. Large quantities of hard wood ashes are bought at 20c. a bushel, and some fish guano (pomace, Mr. Borland called it), the effects of neither of which seemed, (I must say it,) likely to repay him for his very liberal outlay.

Two acres and a half of potatoes were looking well, and the cultivation had been thoroughly attended to; and the same may be said of $\frac{2}{3}$ of an acre of Swedes by their side; but these were on drills 30 inches apart, and dibbled at 15 inches in the rows, distances so great, that no crop of any con-

sequence can be expected where they are observed. The whole tendency of proof from the last 10 years' essays seems to be, that the greatest yield is given, by both Swedes and Mangolds, at 10 inches apart in the rows, and 24 inches between the rows; in other words, a thick crop of moderate sized roots is, not only qualitatively, but quantitatively, better than a thinner crop of large roots.

I was surprised, and sorry, to see not one piece of cabbages in the Townships. I really hoped Stanstead would have grown them; but I suppose the transplanting frightens people, it is unknown, and therefore terrific. When once tried, they will never be omitted from the regular course of cropping.

I think I saw here an improvement in the treatment of pastures. More than one farmer, I may mention among others Mr. Ball, has more than one piece, and I am sure they find a benefit in it.

Mr. Tyrrell's cart-horses are fine roomy animals, and Mr. George Pierce, whom I was sorry to find out when I called, has some fine Percherons. But I was, though not surprised, distressed to see how light and weedy too many of the horses were. The carriage-horse stallions imported from the States, in 1872, by Messrs. Paige and Pomeroy of Compton, have left their defects behind them in their progeny. Long, sprawling animals, with no middle-piece, they had nothing but heads, and tails, and a general showy appearance, to recommend them. I must say I found the Stanstead men sensible of their faults, and only too anxious to get rid of the sort.

I left Stanstead, on the 10th for Lennoxville, by way of Beebe Plain. There are several first rate farms on this road, though property seems to have fallen very much in value. I was shown one house with 13 acres of land, which cost, in 1874, \$6000, and for which the owner now only asked \$3500. Mr. Bigelow and Mr. Cades are cultivating their several farms carefully and well. The latter told me that Mr. Kingsbury's farm, at Derby Centre, I ought to have seen. All the hay, or almost all, is sold, ashes are bought for manure, and the farm under this treatment, has been improving for the last 15 years. This I don't, and can't believe; for land wants more than carbon and potash, and though Beech contains a good deal of phosphoric acid, the ashes can't be all from Beech wood, and the other trees have very little. Where does the sulphur, so largely exported in the hay, to say nothing of the nitrogen, come from? One hears a good deal of nonsense of this sort during the year.

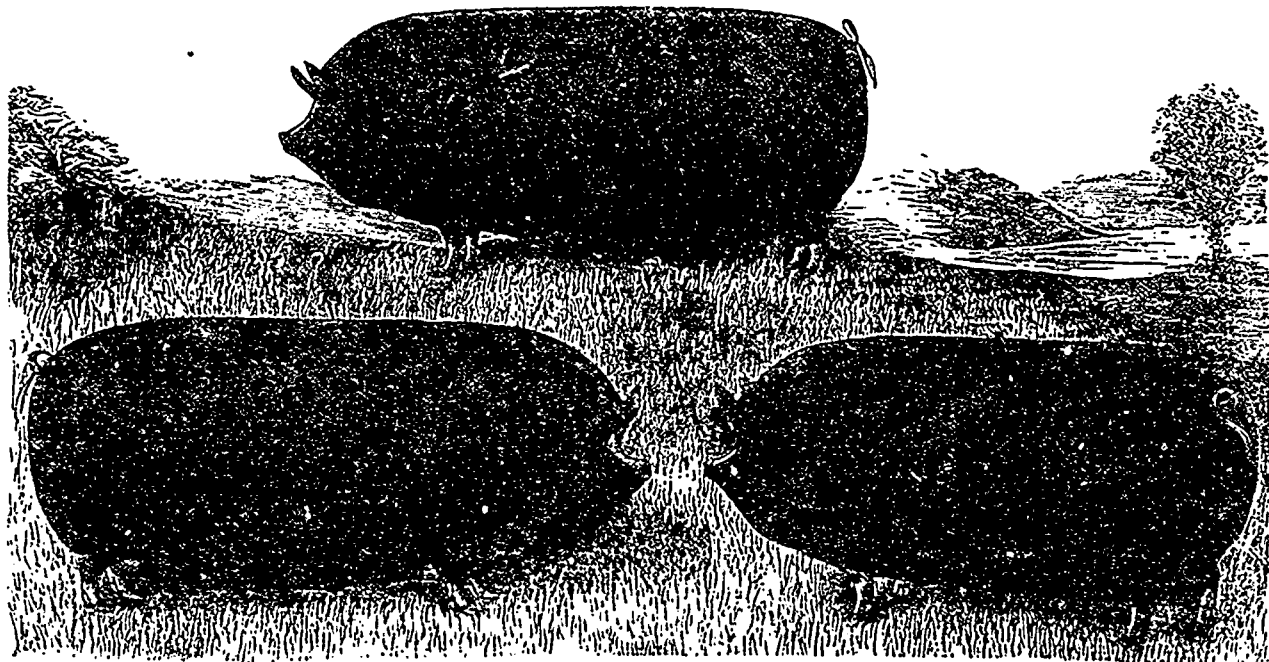
When I reached Lennoxville, I found that the hay had been fit to cut for at least ten days, and not a beginning, even, had been made. This is very sad; for on such a burning soil a few days of heat parches the grass up, and the quality, never very superior, is utterly destroyed. They were waiting for rain, they said: an old story enough; I recollect hearing it from the backward farmers in Kent, England, 40 years ago. "Oh! Yes, Sir, to get the bottom up." Well, but in the mean time the top is spoiling, the seed is ripening, and the land is being almost as much exhausted as by a crop of grain. Every where, from Lennoxville up to Montreal, it was the same thing, except at Messrs. Hobson and Wilson's farm at Sherbrooke, and even there they were some days too late. People won't see how a short delay, caused by rain or anything else, may cause the last 10 acres out of 50 acres of hay to be cut a fortnight after its proper time. Half the crop, I don't hesitate to say, in this district, will be little better than straw before it is mown. Hence the enormous consumption of hay in the province at large, and the little benefit derived from it. Only think of the effect of the hot weather we have had since the 11th, and conceive the state

of the grass which was cuttable 14 days ago! It is the grand fault of this side of the Townships, and one that I hope to see corrected next year. The greater part ought to have been begun on, or about, the 24th of June, and three weeks would have finished it, since no rain fell from June 20th until July 20th, the fine showers we had in Montreal on the 29th not having extended far from the St. Lawrence.

Mr. Shuter's farm, at Lennoxville, after 6 years of earnest work, is thoroughly renovated. The grain crops were looking well; some of the wheat will certainly be over 30 bushels to the acre; and the 5 acres of root crops, on the ground between the village and the river Massawippi, are well cultivated, and ready for the hoe. Three acres of potatoes,

are enough to work a very salutary change in the country; bad hocks, has I have said before, being one of the most prominent faults of the Townships' horses. An engraving of *Arminius* accompanies this sketch of him. It was taken when he was a two-year-old, and gives but a faint idea of him at five years, his present age. His head which, in the print is disproportionately large, has fined down till it is quite perfect, and instead of being longish in the leg, he is now a remarkably compact horse. A pair of well matched 5 year olds of his stamp and action would fetch £100 any day at Tattersalls'.

Arminius by Reveller out of Van Patton's mare, foaled June 14th 1875.



Berkshire Pigs.

however, Mr. Shuter tells me, are in a parlous state; the Colorado Beetle having suddenly hatched a fresh brood and played havoc with them. Two days neglect seems to have done it all.

A quantity of thorough-bred stock, Ayrshires, Shorthorns, and Berkshire pigs, are reared on this farm. A bull-calf by *Centennial* (he by *Narcissus*) promises well, and will take a good deal of beating at the county show (1). The Ayrshires are a good style of cow, rather of the refined stamp, but, with those of Mr. Joe Shuter, they generally manage to carry off most of the prizes of the district. The pigs are well known in the neighbourhood, and come from the same stock as Mr. Hale's of Sherbrooke. The younger brother, I am told, wins all the prizes for butter.

But the cream of the farm is the trotting stallion, *Arminius*, one of sweetest animals I ever saw, and the very model of a sire to get phaeton or brougham horses for the English market. Fifteen hands three inches in height; closely ribbed up, with large flat knees, plenty of bone, and most muscular thighs and fore arms, his colour is not the worst part about him. bright bay, black points, and a small star on the forehead. His head is clean and blood like, his ears perfect in shape, and as sensitive as those of a hare. His hocks alone

(1) *Narcissus* by Royal Commander, out of Waterloo Rose, Roy Com. by Booths Commander in Chief, Gr Gr Grand sire, Bates 4th Duke of Northumberland.

Reveller by Satellite—R. Bonner—Rysdyk's Hambletonian;—Abdallah—Mambrino—Messenger.

Van Patton mare by Ellis's Eclipse—Ely's Eclipse—Old American Eclipse—Duroc—Diomed, to Messenger: Messenger's name occurs 20 times in the pedigree.

His temper is excellent, and some of his stock, a couple of yearlings, and three sucking foals that I saw at Sherbrooke are very promising, but—the pasture they were in was bare, and the yearlings ribs showed, and it is a great pity, and a shame, and its throwing money into the fire, and its all sorts of things to the same effect; but its no good talking; people breed good young stock, stint them after weaning, and then blame the parents for the smallness of the stunted offspring. If a colt won't pay for a bushel of oats a week during the first winter, he must be a poor thing: ten dollars, you may depend upon it, are never better laid out. A young horse is not a *corpus vile*, as some people seem to think, to be brought up any how.

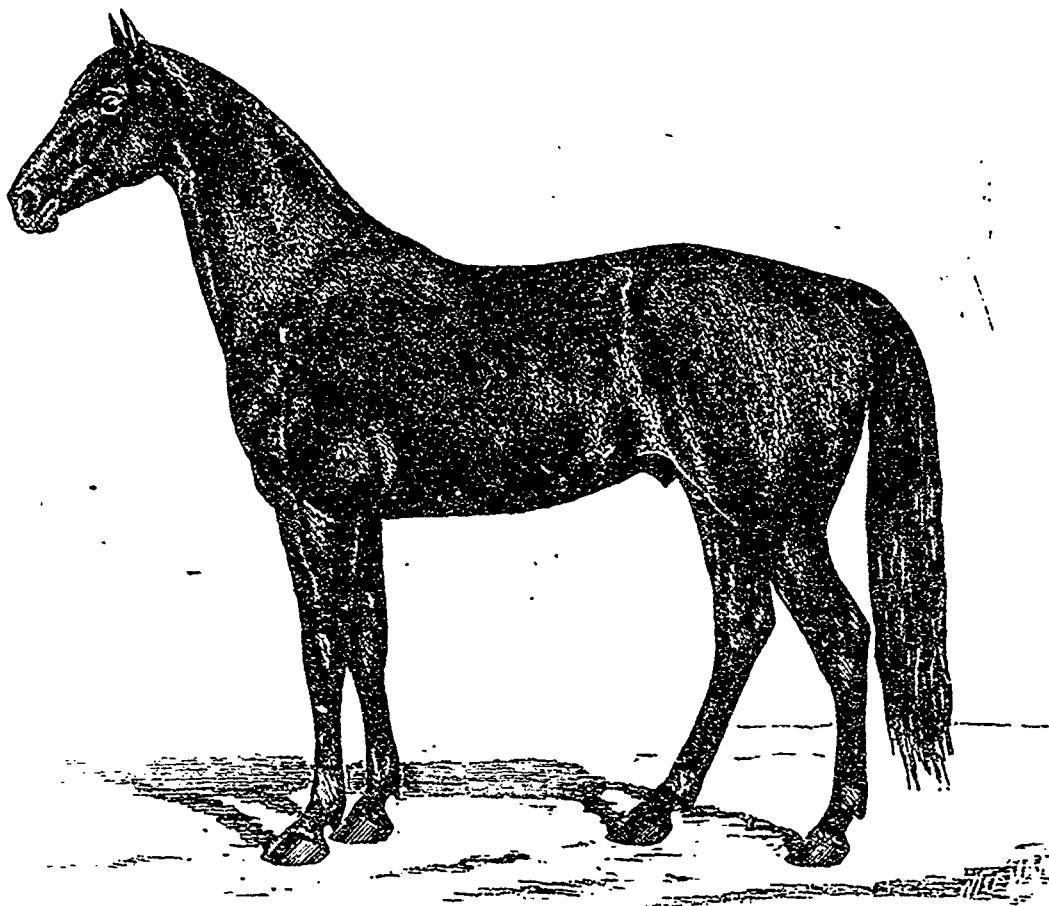
At Lennoxville, as I hinted before, there are no less than five young men, all, curious to say, sons of Colonels in the British army, who have taken to farming, and with considerable success. In fact Mr. Tylee has the reputation of managing his farm in a most masterly fashion. As they are all men of education, it is a fortunate thing for them that they have settled down in this neighbourhood. There must be a very pleasant little society here, including the Principal

and Tutors of the University, and the Rector and Masters of the High School, to help to keep the intellect of these young men from rusting. They have each passed some time with a practical farmer, and with the knowledge acquired from him combined with their own cultured minds, I should imagine many improvements will be struck out, and many a good animal imported and bred. They have the advantage, and a great advantage it is, of entering upon their new business without the drag-weight of antique prejudice, and they will not, I believe and trust, accept any theory, or reject any plan, without thoroughly investigating the reasons for and against them. I need not say that I heartily wish them success, and that I shall be only too glad if, from time to time, when the busy season is over (when is it over?), they will take the trouble to send me any notes of observations that may have occurred to them in their practice, for the benefit of the readers of this Journal. I forget to mention

is well laid out and cultivated. Here was the finest piece of fodder corn I had seen—it really was a superb sight—still I think, as a rule, it is hardly worth the trouble of growing; succulent, if you like, but there is no *proof* in it, and I know that Hungarian grass, or Rape, would do the stock much more good.

The farm has only just come into the present owner's hands but they were fortunate enough to get it in pretty good condition, and, from the stock I saw, I don't think it will be allowed to go back.

The cows are pure-bred Shorthorns, principally bought from Mr. Morkill, and trace back to such sires as *Earl of Compton*, *Duke of Orleans*, 12th Duke of Airdrie, and *Grand Duke*. But, sad to say, they have been bred in an in for too long a time, their hide is papery, and the hind quarters drooping. But a change has been made, and a bull has been imported from Compton which will soon alter the state of



that Dr. Godfrey of Montreal is another of the same sort. His wheat is looking well, but the land is an almost barren sand.

I was unfortunate enough to arrive at Sherbrooke on the same day that Mr. Hencker, Manager of the B. A. Land Company, left that place. He had been kind enough to promise me an introduction to some of the more influential farmers of the county, but Mr. Morkill was good enough to supply what was wanting, and I got on better than I expected.

Close to Sherbrooke lies the important farm of Messrs. Hobson and Wilson. There are 250 acres of it cleared, and the whole, (barring the pasture again,) appears in good heart, and

affairs. Count Careless 2nd is fine red beast, with capital quality, and good rugged coat, perhaps a little wiry to the eye, but the touch is all right. He is by Duke of Oxford 35th (36, 530) and shows the blood of his sire most unmistakably, both in hide and horn. The pigs are pure Berkshire's from the stock of Mr. Shuter of Lennoxville.

This is going to be a breeding farm of celebrity some day, and I do hope that, when they have time to turn round, the owners will look to the pasture. Young Shorthorn stock deserve attention, and will pay for it; without it they soon run out.

The root crops seemed to be all sown on a lea! Strange

practice, but, I think, only a makeshift, and beginners must not be blamed for doing what they can, and not what they would. The plant of carrots, parsnips, and swedes, was capital, but the mangold never came up at all! There was a great deal of bad seed grown everywhere last year; and no wonder, considering the wet season. The hay crop was heavy, and so it ought to be, for the farm had first rate treatment from its former occupant, Mr. Hall, of Sherbrooke, and the Meat Company used it for some time. The Barns are large and roomy, but they won't hold all the produce in a year or two, for there is capital and intelligence to be expended on it now, and if they don't cause expansion of buildings, I don't know what will.

Some young stock, half bred, belonging to a neighbour, Mr. Hale, were looking well. This gentleman has just imported a Berkshire Boar from Mr. Alex. Fulford, of Belair, Maryland, U. S. He is all that can be desired, except that his owner thinks him a little long in the face and snout. He may take comfort, for I hear that the rage for chubby headed Berkshires is dying out in England, and the change of idea will not be long in making its way here. The Berkshire was getting too Essex-like, but I fancy the breeders for profit are harking back to the old type.

Mr. Morkill has just finished clearing and arranging his farm. He has planted orchards, built a good house on it, and, as he says, tried to make it a pleasant, as well as a profitable place to live in.

The cows I saw few of, they were all out away from the homestead, but two or three calves were in the pens. The Bull, Centennial, by Mr. Shuter's Narcissus, bought at Hillhurst, in 1875, is an animal likely to do much good to the herd. He is large enough, and has the fine quarters of the Booth blood, meat to the hocks, but shoulder rather coarse in front, though well filled up behind.

Here I concluded my trip. As for the crops by the side of the Grand Trunk, I find in my note book the following observations: Pastures bare as boards; St. Liboire, crops miserably thin and late, Richmond and Durham, hay burned up, Towards St. Hyacinthe, some good oats, forwarder than any in the Townships, hay-making in full swing, further on, towards Les Soixantes, pease were fair, but corn very poor, at St. Hilaire there was a small piece, probably an experiment, of fall wheat almost, if not quite, fit to cut! And this on the 14th of July! At Boucherville, pease, oats and hay, good, but, again, the cows so poor.

I saw only two pieces of vetches in all my route. Not half enough roots. It does not take much time to hoe an acre when you are accustomed to it. In England, with day wages at 3s., the price for singling and second hoeing is 7s. 6d. to 8s per acre; of course the men earn more than day wages.

Why the cooks at the hotels in the Townships will cut off all the fat from the meat, and then, plugging a lump of lean into a pan half full of water inserted in a lukewarm oven for three or four hours, insult one by offering it at dinner as *Roast Beef*, I cannot tell. Vegetables, except potatoes, too, appear, from their rarity, to be natives of a foreign clime. Lettuce appears in the form of curly leaves, without a morsel of heart, and plentifully be sprinkled with their native soil, reminding me of the *mot* attributed to the late Baron Maule, of facetious memory, who is reported to have said to a waiter, on circuit, who offered him some salad; "No thank, you. I had some last night, and found it was only a gravel walk which had never been weeded." Exaggeration is wit sometimes, if it be huge enough. ARTHUR R. JENNER FUST.

THE AGRICULTURAL PRESS. — A letter, which we have just received from a Cheshire dairy farmer,—"reaching us by the same post as a bundle of American farm papers—

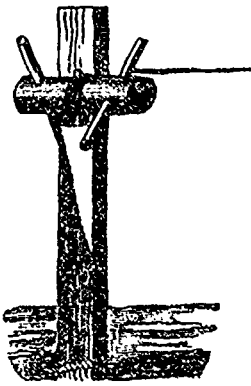
sufficiently emphasises one great difference between the temper of those of the descendants of the original JOHN BULL who have, and those who have not, crossed the Atlantic. The homestayers almost invariably undervalue, if they do not disparage the assistance which the Press is certainly capable of rendering in most emergencies. The generations which have succeeded BENJAMIN FRANKLIN in BENJAMIN FRANKLIN'S country welcome the Press, rely on it, and invigorate it by feeding it with continual new matter. Our exchange papers, from "the other side of the water," are always full of replies to queries for help—as to sick animals—cases of ungenerous soils—as to unthrifty or too vigorous plant growth—as to new varieties, or old ones, which are losing constitution. Our English subscribers rarely send us even a line to tell us what they know. They are equally silent as to what themselves are doing, and as to what others are perplexed about. Yet upon free contributions of current events from actual farmers, the value of all farm papers must, to a great extent, depend. Without wishing to throw cold water on those who are calling on farmers to unite in a new association to put pressure upon Government, it must be said that there is even greater need of a combination of occupiers of land to keep in check the national prejudice against new ideas, and a habit of acting on mere routine. It is quite certain that the conditions of the English food markets have completely altered. No knowledge of old routine can suffice; it is time that those who look to the food market to be recouped should recognise these new conditions. It will not pay any longer to go on doing what successful farmers once were used to do. Seasons, markets, alike require increase of active intelligence to cope with them, and every intellectual activity needs the life and vigour, which come of continued contact, and even conflict, with other intellectual activities. To tackle in print a man whom you believe to be a fool, and to endeavour to confute him and make his ridiculousness evident, is one of the wholesomest of exercises. We give in another column our correspondent's second letter. We had not overlooked his first, but had sent it to a local man likely to have the special information for which we were asked. Such special secrets of management are only to be found where the knowledge sought for is kept wholesome and alive by everyday practice.—*Ag. Gazette.*

May we not be justified in making the same complaint?
A. R. J. F.

ENGRAVINGS.

Our engravings for this month represent. Berkshire boar, and two sows. Bull of the Long-Horned, or Leicester breed. This, it will be remembered, is the original stock whence Bakewell, of Dishley, selected his animals for improving the herds of England, after he had succeeded in fixing the type of the Leicester sheep. The principal breeders are the Duke of Buckingham, and Colonel Fitz-Wygram. Devon Heifer, 15 months old; a perfect specimen of the breed. First prize at Kilburn, 1879. Hackney Stallion—bred by Mr. J. B. Barrow, shown at Kilburn. Arminius—Trotting Stallion, the property of the Messrs. Shuter, Lennoxville, Eastern Townships. A cart for the distribution of Paris Green, or London Purple, mixed with water. For this handy implement we are indebted to the Montreal Witness. Its use is too evident to need description.

Wire Stretcher.—This is simply a cylinder of hard-wood about a foot long and 3 inches in diameter: this has a small hole in the centre for the wire, and one at each end, to admit a half or three inch iron bar, these holes are bored in opposite directions.



Wire Stretcher.

The holes in the post for the wire should be at least half an inch in diameter. The iron bars 18 inches to 2 feet in length. The wire being made fast to the post at the further end of the row, is passed through the opposite one, and through the small hole in the centre of the cylinder; the rods being in place, turn the cylinder gradually—two persons are handier than one at the work—and when the wire is sufficiently stretched, one holds the arms to keep all taut, while the other drives a wooden plug, made ready for the purpose, into the hole in the post. This

should be driven in firmly enough to keep the wire from slipping, and when driven home should project beyond the post for 2 or 3 inches. Unwind the wire from the cylinder, give it a turn around the end of the plug, and the job is done. If it be desired to slacken the wires in winter, unwind the end from the plug, drive it out by means of an iron rod, at the other side of the hole, and the wire can be as slack as desired.—*American Agriculturist.*

VERMIN.

Look out for vermin in the nest boxes. About the worst is the crevices of the partitions. Lime-wash now at least once a month, put kerosene upon the perches in the morning, and keep the platforms under the perches covered with fresh earth renewed at least once a week. Lice are the bane of the poultry house. Fowls that have the run of farms and gardens will keep clean, by wallowing in the dry earth, but a greater part of the year those who live in cities and villages are obliged to keep their fowls in confinement and small runs, and unless carefully looked after, these pests will surely come. There is danger too if the poultry house is attached to or near the stable; they will infest it, and cause trouble among the other animals. The *American Agriculturist* says the best remedy they have ever tried is crude petroleum, or if more convenient the common kerosene oil used for lamps. This is always at hand, and a few minutes labor with the oil can will rout the enemy. We apply it directly to the perches, pouring it from the can. The hens get this oil upon their feet and legs, and it is rubbed all over the feathers. It is penetrating, and the odor seems to be exceedingly offensive to all insects. We can vouch for this as being true, having used it on our own premises with sure effect. S. J. A.

A Poultry-Fattening Company.

The following statements appeared some time ago in the *Boston Cultivator*.

It is probably well known that the process of fattening poultry for market is much better understood in France than in this country. A well fattened chicken or turkey, according to the fashion of our market, is a bird that shows plenty of yellow fat, under the skin, along the back and sides, while with chickens, to be salable, the skin and legs should have a bright yellow color. In France such poultry would be classed only as ordinary, and would be utterly rejected by the epicures who pay the highest prices for luxuries. The best poultry, according to the French standard should show little fat under the skin and this should be of a whitish color.

The finest birds should be heavy in muscle, and tender, the skin white and delicate. These conditions are only attained by a system of forcing which has been developed through years of patient experiment in France, and is now for the first time, successfully imitated in this country.

Many previous attempts at imitating the French system have proved failures, but the persevering character of several parties who have recently established an enterprise for fattening poultry after the French system at Medfield, Mass., gives promise of success. One of their number spent considerable time in France, working in establishments of this kind as a laborer in order to master every detail of the business. At present the Medfield concern is killing daily about eighty fowls, for the use of some of the best hotels in Boston.

The birds are purchased by agents in various parts of the State, and are placed temporarily in the "reception rooms" on arrival at the yards. These are simply well ventilated sheds of ordinary character, where the fowls are fed and allowed to sun at will, until they are wanted for forcing. They are then placed in the fattening house, a warm, well ventilated building, provided for the purpose. For ten days they are subjected to a system calculated to remove the yellow fat, and then for ten days subsequent are crammed with a porridge of milk and meal (barley and rice being largely used, with some corn), and at the end of twenty days are immediately killed, their room being daily replaced by freshly purchased birds.

The building has accommodations for 1700 birds; 84 are killed daily, and 84 more take their place from outside. The temperature of this building is kept at about 60° by steam pipes, the coops are so small only one bird can be kept in each. They are daily cleaned out, the bottom boards being washed and steamed, to remove all taint. This attention to cleanliness, the labor of preparing food, and the dressing of fowls for market, gives constant employment to eight or ten men. Thirty cans of milk daily are required to mix the food. This milk is at present purchased of the neighboring farmery. The manure from this style of feeding is of a thick, pasty consistence, difficult to handle, but very rich, and highly esteemed by the farmers in the neighborhood—who willingly pay one dollar per barrel for it.

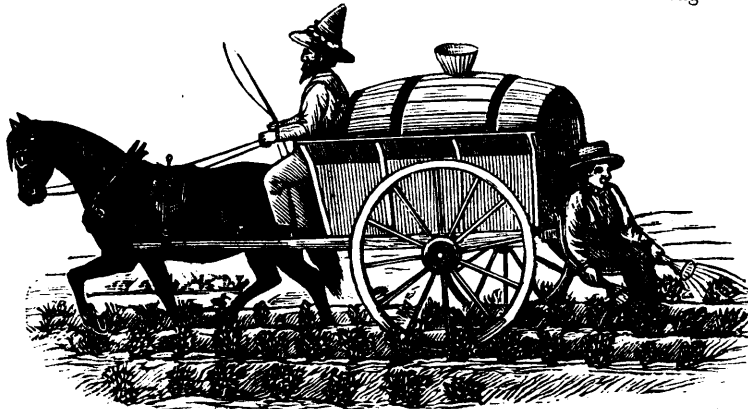
The poultry produced by this process is already highly esteemed by those who have tested it, and seems likely to come into greater favor as it is better known. It sells for about ten or fifteen cents per pound above the price of ordinary poultry, while it is claimed such poultry is worth this difference, since there is very little waste in the shape of the gross and indigestible yellow grease which encumbers the ordinary fat fowl.

The enterprising men who have undertaken this business are unwilling to lay open to the public all the details of their business, and with good reason, as the learning them has cost considerable time and money, also being of such a nature as to be unpatentable. They are however, confident that their improved methods will produce an article that will commend itself to the refined taste of a discriminating public, and that they will reap a sure reward for their enterprise. We wish them the success that their enterprise deserves.

Trouble with Young Turkeys.

A farmer's wife complains of want of success with young turkeys. They seem strong the first week, when the middle toe begins to draw around like a fish hook, and in few days the other toes turn in the same way; they lose all use of their feet, and die in a few days. Others seem well in the morning when let out, but sicken and die before night. This is cramps or rheumatism, about which I wrote a week or two ago in the *Tribune*. The trouble is brought on by dampness and cold. These two conditions are furnished by wet grass and damp ground. The chicks must be kept in proper places, where it is dry and warm, for the first week of their lives; after this they may be allowed to go abroad with their dam in dry, warm weather, but they should not be let out until

the grass is dry in the mornings until they are a few weeks old, after which they are out of danger from cramps. Young turkeys are quite tender at first and need nice care and attention. The best feed for them for the first week is scalded corn-meal crumbs. It must not be wet and sticky, but of a crumbly consistence. Curd is good for young turks, and after they are a week old they may have as much of it as they will eat three times a day. Cracked or broken corn may be mixed with the curd, or fed separately. Good wheat screenings or sound wheat, or buckwheat, or barley, are a good and proper food for young chicks of any kind. In cool, damp weather a few drops of tincture of iron may be added to the water with which the feed is mixed. *Dr. Dickie in Lancaster Farmer.*



A cart for the distribution of Paris Green.

The Potato Bug vs. the Beanstalk.

SIR,—I see by this day's *Witness* another mode of destroying the potato bug, simply by using what is known as London purple done up in packages with instructions how to apply it. Well, sir, anything which could effectually destroy this insect would undoubtedly be of great value, but is not prevention better than cure? Whilst in conversation with a Mr. Giroux, of No. 487 Seigneur street, this afternoon, I made a remark to him that his potatoes looked well at a distance. "Yes," said he, "I wish that I had sown beans amongst all my potatoes, for where the beans are sown the bug has done no harm at all." "Come into my field," said he, "and see for yourself." So I went in and, sure enough, I found his statement correct. There is one part of his field planted with both potatoes and beans, and this portion is safe from the ravages of the bug, whilst the other part of the field is completely swarming with the pests. So I asked Mr. Giroux what was the cause of it. He said that the beans grew up and partially covered the potato whilst young, keeping the heat of the sun from the potato stalk, where the young bugs were most likely to be produced. That, said he, is only my own opinion, but, whatever is the cause the above statement is correct as any one can see by calling at Mr. Giroux's house, on Seigneur street, when he will willingly take them through his fields to satisfy themselves. Now, sir, I hope that you will find a corner in your paper for these remarks, as it may be the means of causing some to find out the real cause of their absence where the beans are growing, until the potato gets higher than the bean. Then on the potato above the bean may be found an old bug or two, but they cannot do much harm at this stage.—

WILLIAM ELLIOTT.

MONTREAL, JULY 10TH, 1880.

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GRAND DOMINION EXHIBITION.—TO BE held on the Provincial Exhibition Grounds, Mount Royal Avenue, Montreal. **OPENS TUESDAY, SEPT. 14th, CLOSES FRIDAY, SEPT. 24th, at 2 P.M.**

\$20,000 OFFERED IN PREMIUMS.

Entries must be made with the Secretaries in Montreal, on or before the undermentioned dates, viz: Horses, Cattle, Sheep, Swine, Poultry, Agricultural Implements and Dairy products, to Saturday, September 4th; Fine Arts, Manufactures, Implements, Machinery, Stoves, &c., to Saturday, August 23th. Prize Lists and Blank Forms of entry can be obtained of the Secretaries. For further particulars apply to

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