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# THE ILLUSTRATED JOURNAL OF AGRICULTURE

PUBLISHED BY THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF QUEBEC.

Vol. II.

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### Translation.

*Copy of the Committee's Report of the Honorable the Executive Council, dated the 26th of August, 1880, and approved the same day by the Lieutenant Governor. No. 311.*

Concerning the approval of certain deliberations of the Council of Agriculture.

The Hon. the Commissioner of Agriculture and Public Works, in a memorandum, dated 20th August, 1880, recommends, that the deliberations of the Council of Agriculture of the 30th March, and the 5th August, 1880, be approved, except as regards that part of the deliberations of the 30th March, 1880, which tends to encourage the production of pure-bred animals, to the discouragement of Canadian cattle, pure or half-bred.

The Committee concurs in this recommendation, and submits it for the approbation of the Lieutenant-Governor.

Certified Copy.

(Signed) GUSTAVE GRENIER,  
Deputy Clerk of the Executive Council.

### Deliberations of the Council of Agriculture of the Province of Quebec.

*Montreal, March 30th 1880.*

Present: Messrs. Beaubien, Benoit, Blackwood, Browning, Casgrain, Gibb, Gaudet, Massue, Marsan, the Revd. F. Pilote, Somerville, Ross and the Revd. S. Tassé.

The President having taken the chair, the Secretary read the proceedings of the last meeting, which were approved.

The report of the Executive Committee was then read by the Secretary, and approved.

The request of the Agricultural Society of the County of Drummond as to the sale of a property, known as the "Agricultural Hall," was read.

The Council after having examined certain documents relating to this affair, decided to grant the request only so

far as that the Society of the County of Drummond should be able to effect the sale in a manner conformable to law.

A petition was read from the farmers of a part of Bonaventure County, requesting leave to form a second Agricultural Society to be known as the "Agricultural Society No. 2 of the Division A of the County of Bonaventure," comprising in its limits the townships of Maria, Carleton and Nouvelle. The request was granted.

A petition was read from Society No. 2, county of Gaspé, praying to be excused from holding competitions for the best cultivated farms.

Resolved: That the Council of Agriculture, in the case in question, does not think it advisable to depart from its rules, which it considers likely to produce salutary changes in the practice of husbandry; but, at the same time, the Council would remark that if the Society No. 2, of the county of Gaspé, is unable to find competitors qualified in all points mentioned in the programme of the Council to whom they may award prizes, still they may give these prizes to those farmers whose system of cultivation approaches the nearest to the model proposed to them.

A petition of the Agricultural Society of the county of Beauharnois was next considered, asking to be allowed to omit their annual Exhibition, and to employ their funds for the purchase of a Stallion of pure blood: also to be allowed to charge 25c. admission to non-inhabitants of the county.

The Council, understanding that it is the intention of this Society to buy a Clydesdale Stallion, and agreeing with the Executive Committee, grants the request, on condition that the Stallion in question shall be of the value of at least \$1000; and the Council also permits the Society to charge 25c. admission to non-inhabitants of the county.

A petition was read, from the Agricultural Society of the county of Berthier, asking leave to employ part of their funds for the purchase of thorough-bred stock, and a stallion for the use of the Society.

The first of these requests was granted at the recommendation of the Executive Committee, but, as to the purchase of a Stallion, a proviso was made, that it must be a Clydesdale, Norman, Percheron, or of some other pure breed.

The Agricultural Society No. 1, of the county of Chicoutimi, prayed to be exempted from holding their Exhibition this year, and to be allowed to appropriate their funds for the purchase of breeding stock.

This prayer was granted by the Council, on condition that the Society should spend at least \$500 in its purchases, and that the animals bought should be thorough-bred.

A petition of the Agricultural Society No. 2 of the county of Chicoutimi was read, asking leave to buy seed, at the rate of 75c. per member; and that subscriptions should be received, at the same time, for the purchase of shovels, forks, ploughs, &c. for the use of its members. The Council grants leave to buy seed on the usual conditions, but it cannot allow the Society in question to spend its funds for the private

advantage of its members, any more than it can allow a profit to be made by each of its members of 75c. in the distribution of seed.

Leaveo was asked for by the Society No. 1. of the county of Montmorency to buy seed and breeding stock with the subscriptions of its members.

The permission sought was granted by the Council, pointing out at the same time that the Society must not spend its money for the private benefit of its members.

The Agricultural Society of the county of Quebec prayed the Council to suspend its regulations as to the purchase of thorough-bred stock, the rules in question placing the very existence of the Society in peril, it also states that it does not distribute seed to its members, but instead, it gives, as an *extra prize*, a sum equal to the amount of his subscription to each exhibitor who has not gained a prize at its exhibition.

Resolved: that the Council cannot change its determination not to allow the Societies to give prizes to half-bred bulls: the Council, moreover, finds itself obliged to oppose the system followed by the Society of the county of Quebec of giving an indemnity in money to the unsuccessful competitors at its Exhibitions; which would have the effect of enabling the Society to transact all its business, and carry on its affairs with the government grant alone, the members only subscribing with the understanding that later they shall receive their money back again.

A letter, from Dr. McEachran, was read, inviting the members of the Council, to be present at the distribution of diplomas and prizes to the pupils of the Veterinary College, at 4 P. M.

The invitation was accepted, and the members having decided to be present at the distribution of prizes and diplomas, the Council adjourned till 2 P. M.

#### Session at 2 P. M.

The same members being present, the Council took into consideration the work brought out by the Rev. M. Pilote on the Programme for the best cultivated farms.

Resolved: That the final approbation of the programme in question, as revised and corrected, be reserved for another meeting.

The Council took into consideration the notice of motion given by M. Benoit, at the last meeting, recommending Shorthorn bulls as being the best calculated to improve the stock of the country, as regards Exhibitions.

The advice of the Executive Committee, suggesting that the Agricultural Societies should have the right to choose the animals they purchase, themselves, always provided that they are pure-bred, was adopted on the following division:

For: Messrs. Somerville, Marsan, Beaubien, Casgrain, Gibb, Blackwood, Browning (7).

Against: Messrs. Gaudet, Benoit, Ross (3).

Mr. Blackwood, seconded by Mr. Somerville, moved: That Mr. Browning be added to the Committee of the Schools of Agriculture: carried.

Mr. Bonyn was introduced, and explained to the Council his views on the use of pulverised *apatite*, or *phosphate of lime*, its value as a fertiliser, and the facilities which exist for its preparation. Mr. Bonyn offered to present the members of the Council with a certain quantity of this artificial manure, to enable them to make a trial of its effects.

Mr. Browning, seconded by Mr. Somerville, moved: That no future payment be made to the Agricultural Schools of L'Assomption and St. Francis, as long as these schools shall not have forwarded their annual report for the year 1879 to the Council.

The consideration of the report of the St. Anne's School of Agriculture was put off to another time, and the Council adjourned till the next day, to enable the members to be

present at the distribution of diplomas at the Veterinary College.

Wednesday, 31 March, 1880, 9 A. M.

The same members being present, at the request of the Hon. G. G. Ross, the Council reconsidered its decision, of the date of Jan. 14th 1880, obliging the agricultural Societies to give prizes to no bulls that are not thorough-bred; and, after discussion, Mr. Ross, seconded by M. Pilote, moved:

That the Canadian breed of cattle, or that breed crossed with foreign stock, offers, in certain districts of the country, sufficient advantages to justify the Council in awarding prizes to Canadian bulls, or half-bred Canadian bulls, without demanding their pedigrees, so long as the weight and form of the animals in question testify that their breeders have taken pains to improve the sort; but without prejudice to the encouragement which ought to be given to the system of crossing with thorough-bred animals, which, generally speaking, offers much greater advantages.

This motion, put to the vote, was lost on the following division:

For: Messrs. Ross and Pilote (2).

Against: Messrs. Marsan, Casgrain, Blackwood, Beaubien, Browning, Somerville. (6)

The question as to the purchase and distribution of seed by the Societies of Agriculture was again taken up, and Mr. Ross, seconded by Mr. Casgrain, moved:

That the advantage of sowing grass-seeds is not yet sufficiently recognized, and, in order to encourage the practice, the Council should allow the societies to pay to the members the amount of their subscriptions in seed, whenever they shall think it advisable.

This motion, put to the vote, was lost on the following division:

For: Messrs. Ross and Casgrain. (2)

Against: Messrs. Marsan, Beaubien, Browning, Blackwood, Somerville, Pilote (6).

A letter was read, from Mr. James Duncan, on an apparent contradiction between the regulations of the Council and the Act of Agriculture, as to the election of Directors of the Agricultural Societies. The Secretary was instructed to answer Mr. Duncan's letter, and to give him all the necessary explanations.

The Council then adjourned.

Approved this 5th of August, 1880.

(Signed) L. H. MASSUE, President.  
C. A. P. Q.

True copy.

(Signed) GEORGES LECLÈRE, Secretary.

Council of Agriculture of the Province of Quebec.

Montreal, August 5th, 1880.

PRESENT: Messrs. Benoit, Browning, Casavant, DeBlois, Faribault, Gaudet, Gibb, Guilbault, Massue, Somerville, Ross, and the Revd. S. Tassé.

The President having taken the chair, the Secretary read the proceedings of the last meeting of the Council, which were approved.

Mr. Browning enquired if the proceedings of the last meeting had received the approval of the Lieutenant Governor in Council.

The Secretary produced a letter from the Department of Agriculture, dated the 31st of July last, informing him that the resolutions passed by the Council of Agriculture at their meetings of the 27th of August 1879, and the 15th of January 1880, would be approved on the day the letter was written, except the resolution by which the Agricultural Societies are forbidden to give prizes to half-bred bulls, which resolution was still under consideration.

Mr. Browning, seconded by Mr. Benoit, moved :

That, for the future, no meeting of this Council shall be convoked, as long as the Secretary shall not have received official information that the proceedings of the previous meeting have been approved or disapproved by the Lieutenant Governor in Council as required by the 39th sect. of the Agricultural Act.—Carried.

Mr. Browning called the attention of the Council to the importance of introducing at the Provincial Exhibitions a working Dairy Exhibit upon the plan followed in many parts of Europe and in the United States, shewing in operation the most approved methods of butter and cheese making.

The Secretary was instructed to ascertain when and where Dairy Exhibitions are to be held in the United States, with a view to the same being visited by a Committee of the Council, and the President was authorized to name a delegation, which shall be specially charged to study and report upon this important subject.

The President reported that Messrs. Bulmer and Shepperd have made a request for a grant in aid of the manufacture of drainage tiles for the year 1879.

Resolved: That the Council having decided, by its resolution of the 21st of August, 1878, that the contract of Messrs. Bulmer and Shepperd should be continued for one more year, but that the grant should, for the future, be done away with, it is evident that these gentlemen can have no claim to the grant.

The Secretary submitted the annual reports, for 1879, of the Agricultural Colleges of St. Anne, l'Assomption, and St. Francois, as well as that of the Veterinary College at Montreal.

Resolved: That these different reports be referred to the Committee on Schools, with a request to report upon them at the next meeting. The Secretary was requested to ask the President of the School Committee to appoint a time which will suit him to visit the Schools.

The Committee on the "Fruit-Growers Associations" reports that certain persons in the Counties of Bromo and l'Islet have enrolled themselves into two "Fruit-Growers Associations," and request to be allowed a share in the sum granted to such associations.

Resolved: That, on the recommendation of the Committee, the Secretary be instructed to acknowledge the receipt of these requests, and to inform the Secretaries of these associations that their organisation has been recognised by the Council. When they shall have fulfilled the conditions on which these societies are formed, in compliance with the 2nd section of the regulations which govern them, and when they shall have transmitted to the Council a report and a statement of their affairs such as demanded by the 20th clause; then, a sum of fifty dollars (\$50) shall be paid to each of the societies at the end of this year.

The Secretary submitted the programme for the best cultivated farms, the work of the Rev. S. Pilote, as reviewed and corrected by the Council. As Mr. Pilote was absent, its final approbation was put off till another meeting.

Mr. Browning, seconded by Mr. Blackwood, moved :

That the Secretary be instructed to write to the Government requesting the payment to the permanent Committee of the Exhibition of the sum of 10 0/0, retained from the grant made to the Agricultural Societies of the province.

#### DRAINING.

It is a remarkable fact, and one that is well worthy of consideration, that in those counties in the East of England where we find the earliest attempts at thorough-draining, the practice of this remarkable art remained unimproved, and was

executed in a purely empirical manner; while over the rest of the country, men of really scientific attainments were conducting the operations, and producing ten times the beneficial effect with no additional outlay.

I observe in an article written some time ago, by a Canadian gentleman well skilled in agriculture, that a drainer was imported at a great expense from Britain, and a large subsidy paid to a brickmaker to embark in tile-making, and an idea crept into my brain, that it would have been as well if, before importing the man the importers had settled in their own mind what he was to do. I have no doubt he thoroughly understood his business at home: the climate, the soil, and the rain-fall must, if he had gone to work here, have soon convinced him that his pre-conceived plans would need alteration.

I do not speak without having not only thought upon the subject deeply, but also followed out my thoughts in practice. I have drained several hundred acres of land on my own account, and inspected the drainage of several hundred acres more, besides having constantly watched the operations of Parkes, Morton, and other well known engineers employed to superintend the works under the Commissioners of the drainage-loans in England.

I began with bushes, next went to stones, then to horse-shoe tiles and soles, afterwards to pipes, and ended with the most perfect of all, pipes and collars. I have drained all sorts of land: light quicksands, heavy London clay, and loam on gravel.

All depths, too, I have worked at, from 20 inches, to 4 feet 6 inches, and occasionally as deep as 9 feet, for springs.

I know the cost pretty well, and I know how absurd it would be to attempt to introduce our permanent system into general use here. We have neither men to execute the work, nor money to pay them with if they did it. But there are cheap and effective ways of draining land, in our climate and with our soil, that might be employed with the greatest advantage to the individual farmer, and to the nation at large. *Eight bushels and a half of wheat per acre!* Really the last sentence ought to be suspended in large characters at the entrance to every village in the Province of Quebec: it is positively frightful to contemplate such a yield. And why are we so shamefully behind other-countries? I answer, because, amongst other faults, our land is undrained. Do you imagine that the crop of nearly 40 bushels of fall-wheat per acre grown by Capt. Campbell at St. Hilaire had kept its toes in cold water all the spring? By no means; (v. Sep. number) the land was thorough-drained 25 years ago, and no signs of stagnant water are visible over the whole piece.

Nobody knows better than I do, that large sums of money have been thrown away by men having more money than judgment in attempting to drain land in this country without having the least idea of what they were about. I have seen drains, the conduits of which were scraped by the plough at the ordinary furrow depth! I have seen drains, laid by those who ought to have calculated expenditure a little more closely, 14 inches deep and 14 inches wide, with large stones for top, bottom, and sides. No wonder the ordinary farmer, seeing these follies, sneered at their perpetrators, and determined, if this were drainage, to have nothing to do with it. And how to win these properly disgusted men back to a calmer view I do not see; but I will try to show them how land may be drained cheaply and effectively with materials to be found on their own farms, and if I can induce one farmer in every county of the Province to attempt to follow out as much of my plans as may seem reasonable to him, I shall be satisfied: for I am sure that if the work be done in a careful, painstaking fashion, it will not be long before his example is followed by his neighbours.

And first, let us see what land wants draining, and why. To understand this question thoroughly, we must consider what things are necessary to the germination and growth of the seeds we commit to the bosom of the earth. They are, as far as we know, three in number, viz., air, heat, and moisture. A seed in a healthy state is a living object, in a state of repose, but ready to spring into active life the moment it meets with the three concurrent necessities above mentioned. What is the exciting cause of the vitality of seeds we do not know—it is one of Nature's secrets which she has not yet imparted to man; but we do know what is necessary to excite this vital spark into action, and it is our business, as farmers, to take care that we foster, and not impede, the efforts of the great mother for our advantage.

If any of my readers have access to a malting establishment, an inspection of the barley on the floor and couch will give them a better idea of the germination of seeds than the longest description. They will see that, on the third or fourth day after the grain has been taken out of the steep, i. e. a tub of water in which the barley lies for 48 or 72 hours, according to its quality; they will see, I say, a small white bud springing from one end of the grain which, having just seen the light, shrinks from it, and, turning back, proceeds under the husk to find itself, on its exit at the other end, a green shoot or *plumule*. Immediately after the appearance of this bud, the small white rootlets show themselves, and the plant is ready to take advantage of any food within its reach—up to this time it has been fed entirely with the starch contained in the seed, which, to secure its more facile imbibition by the infant germ, has been converted into dextrin, or gum, and then into sugar, by what is called the *Diastase*, a substance formed from the *albumen*, or nitrogenous portion of the grain. Hence the sweet taste of malt compared with the original barley: the starch of the one has been partially converted into the sugar of the other; and the maltster takes care to place his *pieces* on the kiln to dry, before the *plumule* shoots forth into the green leaf, and begins to feed upon this substance. "With the assistance of this saccharine secretion," says Lindley, "the root at first a mere point, or rather rounded cone, extends and pierces the earth in search of food; the young stem rises and unfolds its cotyledons, or rudimentary leaves, which, if they are exposed to light, decompose carbonic acid, fix the carbon, become green, and form the matter by which all the pre-existing parts are solidified. Thus a plant is born into the world, its first act having been to deprive itself of a principle (carbon), which, in superabundance, prevents its growth, but, in some other proportion, is essential to its existence."

We now see why light is not only unnecessary to the healthy germinations of plants, but absolutely injurious. In light the leaves absorb carbonic acid and give off oxygen, and seeds exposed to the light follow the same rule; but in a healthy process, the reverse takes place, carbonic acid is given off, and oxygen absorbed, and how can we better exclude light than by covering the seed with earth? But, as we observed at starting, the earth in which we bury the seed must be in a peculiar condition: it must, first of all, contain air. Though, at a casual inspection, the soil seem to be too closely packed to admit the air, looked at more narrowly it is not so, but the interstices between the particles of the mould will be found to occupy a fourth part of the whole mass. Hence 100 cubic inches of soil, finely pulverised, contain 25 cubic inches of air, the depth of ploughing being taken at 8 inches, the number of cubic inches of air on an acre will be 12,545,280, and as every additional inch of depth pulverised brings into activity 260 tons of fresh soil, the ploughing one inch deeper will introduce into the soil 1,600,000 cubic inches more air. Thus, the deeper we plough, the greater amount of air we lay up as a store for the use of our plants.

Fig. 1 represents a grain of wheat magnified: *a* and *b* are the two skins, inner and outer: *c* is the cotyledon, and *d* the rudimentary plant, whence spring the root and stems.

Fig. 2 is a wheat plant germinated: *a* is a stem which has just left the sheath. *b* another starting: *c* another unevolved, and *d* the roots.

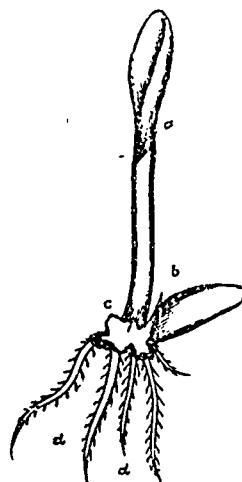


Fig. 1.

This air, again, must be above a certain temperature, or else the seed's vitality will remain dormant. Now, the more thoroughly pulverised land is, the more easily will it resist the induction of cold from without, and the less easily will it radiate its internal heat.

Besides clods and stones, the presence of water will exclude air. Fig. IV shows the seed lying in a well pulverised soil, the interstices of which are filled with water instead of air. Here, too, the seed cannot germinate freely; and, besides, water, during the necessary evaporation that takes place,

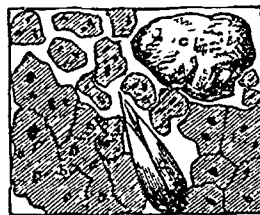


Fig. 3.

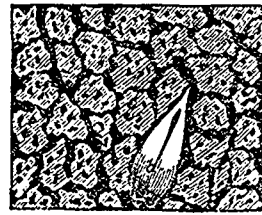


Fig. 4.

produces cold, another hindrance to free germination. On the other hand, entire want of moisture prevents germination, as much as excess; as may be seen in fig. V, where the seed is placed in pulverised earth, and the interstices filled with air, but no moisture is visible between and in the particles of soil. When land is in this state, heat can enter and escape from it with equal ease, so the evils of the want of moisture, and of excess of heat, are evident. In fig. VI, however, we see the soil as it ought to be: the seed lying in its comfortable bed. The air finds easy access between every particle of soil, and the general warmth of the season, whether Spring or Autumn, finds an easy road to it; germination begins, and the future growth meets with neither check nor obstacle.

From the previous considerations we deduce the conclusion, that all soils which do not rest on a naturally pervious subsoil require draining. For, it will be seen, on inspection, that, where land lies wet in winter, cultivation in Spring produces clods, instead of a finely pulverised surface; and instead of the early heat of summer warming the soil, it in reality chills it by evaporation. On such land, large belts of dark coloured earth may be seen in May, dotted about, here and there,

It will easily be understood, that when the land is left full of stones and clods, the air cannot penetrate these obdurate masses, and, in consequence the roots in their tenderest stages are left to fight their own way under the greatest difficulties. Fig. III.

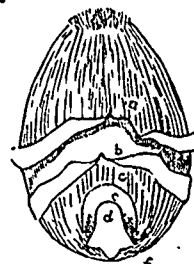


Fig. 2.

among the lighter coloured parts: the plants want vigour when they start, their green is pale, the herbage coarse, hard uninviting. The tread is unequal, one part of the foot sinking deeper than the other: the stock never seem satisfied: the trees have hard bark, and are covered with parasitic plants: the roads are soft, and full of ruts: the ditches plashy, and always falling in: mosquitoes, midges, all sorts of horrible insects fill the air: the plough, scuffler, and harrow have double work to do, and, even with double work, never succeed in pulverising the soil into a fine mould.

In the climate of our Province, it is something to add ten days to each end of the season. Draining will effect this, at least, and will help in enabling us to sow autumn wheat, if we

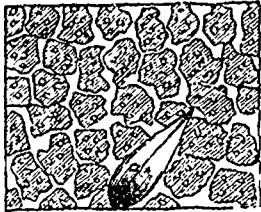


Fig. 5.



Fig. 6.

wish it. Why we don't wish it, I cannot conceive; for every show at Montreal proves that it can be grown to advantage, and Cap. Campbell's farm at St. Hilaire, described in the September number, would convince an infidel. Of course, autumn wheat won't grow in a swamp; but drain the swamp, and then try!

I do not think our draining here will ever be systematic work; that is to say, that whole farms, or even whole fields, will be drained on a regular plan at 25 to 33 feet apart. In the first place we can't afford it, and, again, the summer's heat acts too rapidly to make such intensive work absolutely necessary. It would pay, I doubt not, in the long run, but I look upon it as hopeless, and therefore pass it by.

No, what we must look for is local drainage, wet spots, here and there, in corners, under the line of a wood, in sheltered places where the wind cannot reach: this is about all we can, at present, manage. And it must not be supposed that I by any means underrate the value of even this slight improvement. The effects of this practical work will, when its benefits are seen, give each one who tries it an appetite for the task. It is so interesting in itself, to say nothing of its profits, that when once a man begins draining I have no fear of his halting on the road: if he begins with bushes, he will end with pipes.

Whatever material we may use for our conduit, we should form, first of all, a clear idea of the way in which the water is to get into it. Many people have a notion, that each drop of water that falls from the clouds, when it reaches the ground, has to hunt its way through cracks and crevices, following the easiest route, in fact, until it falls into the drain at the top. Nothing can be farther from the truth. *Percolation* is not the way. It is all done by the force of *gravity*. My readers all know that a sponge will hold a certain quantity of water, and no more. Let us conceive for a moment a sponge fully saturated: an additional drop is added from above: what happens? A drop oozes out from the bottom. So it is with drained land; but with this difference: the lowest drop, not being able to escape in any other way, is pressed upon by its superincumbent neighbours, and finds the easiest mode of disembarassing itself from the annoyance is to divide itself in two, and go, one half into the drain on the right hand, and the other into the drain on the left. We know very well that, after a dry time, drains do not run until the body of earth between them is fully charged with water, and we now see the reason why they do not: gravity acts

more easily in proportion to the depth it has to work upon; and this consideration alone should put an end to all idea of shallow draining; it having been satisfactorily proved by experiment, that, in a heavy clay soil with alternate drains of 30 inches and 48 inches deep, respectively, the 48 inches drains always begin to run, after rain, at least 24 hours before the others.

This, incredible as it may seem to some, I know to be a fact; and it can only be accounted for on the principle we have just enunciated. In Essex, Eng. again, where very shallow draining, at frequent intervals, had long been practised, upon the introduction of deep drains (in the same fields) the shallow drains ceased to run at all, not even acting as subsidiary feeders to the deep ones, when the latter crossed them at a lower level: gravity acted on a column of water 48 inches high, more easily than on one of 18 inches.

It has often been wondered at by non-critical observers, that an *open ditch* will allow a pool of water to stand within a foot or two of its lip; and that no deepening of the ditch seems to have any effect on the retentive spots.

The solution of the question is, that, in retentive soils, all currents of water *puddle* their bed, and prevent the water rising up through it: this by the way.

So much for the theory of drainage. Next month we will attack the practice.

ARTHUR R. JENNER FUST.

On Saturday, Oct. 23rd, I went to Outremont to see the root-crops of the Hon. Louis Beaubien. I was, I confess, completely taken by surprise; not so much by the mangolds, as by the carrots. The former were a good crop, though they had missed plant, here and there; but the White Belgian carrots were really superb. They stood as thickly as possible in the rows, and in size were equal to an ordinary quart bottle, or nearly so. There must have been, at the least, 25 tons per acre.

The land on which these roots were grown had evidently been a black sandy swamp; but drainage and cultivation have rendered it firm and homogeneous, and I shall be curious to see the crop of oats next season: I do not fancy it will grow wheat or barley to advantage. A good dressing of lime would do wonders for it, when it comes in turn for grass.

A. R. J. F.

**Dominion Exhibition.—Official Prize list.**  
1st CLASS HORSES.

- Thoroughbred Stallion 4 years old and upwards:  
Sect. 1st. Prize 1st. John Clark, Nepean 2nd prize Dawes & Co., Lachine. 3rd prize, Osborne Morton, Blue Bonnets.  
Sect. 2nd. No Competition.  
Sect. 3rd Stallion 2 years old. 1st prize, Dawes & Co., Lachine.  
Sect. 4th No competition.  
Sect. 5th. Filly 3 years old: 1st prize, Hugh Paton, Montreal.  
Sect. 6th. Filly 2 years old: 1st prize, Dawes & Co., Lachine.  
Sect. 7th. Yearling Filly. 1st prize, Jos. Hickson, Montreal. 2nd prize, Dawes & Co., Lachine.
- ROADSTER HORSES FOR DRIVING 15½ HANDS AND UNDER.  
Sect. 1st. Stallion 4 years old and upwards. 1st prize, Norman McLeod, Eldon 2nd prize, William Lagan, Allan's Corner. 3rd prize, Isidore Charlebois, Pointe Claire.  
Sect. 2nd. No Competition.  
Sect. 3rd. Stallion 2 years old: 1st prize, Dr. Bergin, Cornwall 2nd prize, Nap Lachapelle, St. Paul Hermite. 3rd prize, Andrew Scott, St. Laurent.  
Sect. 4th. Filly 3 years old: 1st prize, Andrew Scott, St. Laurent. 2nd prize, Dawes & Co., Lachine 3rd prize Dr Bergin, Cornwall.  
Sect. 5th. Filly 2 years old. 1st. prize, Dr Bergin, Cornwall 2nd prize, Dawes & Co., Lachine. 3rd prize, G. O. Rainboth, Aylmer.  
Sect. 6th Brood mare with foal by her side: 1st prize, Nap. Lachapelle, St Paul Hermite 2nd prize, L. Brasseau, Laprairie. 3rd prize, James Curry, Curry Hill.  
Sect. 7th Pair matched horses in harness: 1st prize, Victor Beaudry, Montreal. 2nd prize, R. Elliot, Village St Jean-Bte. 3rd prize, John Davis, New Glasgow.

## ROADSTER 15½ HANDS AND UNDER.

Sect. 8th. Single horse in harness: 1st prize, G. B. Baker, Sweetsburg. 2nd prize, Hector Lussier, St. Vincent de Paul. 3rd prize, J. O. King, Montreal.

## CARRIAGE HORSES OVER 15½ HANDS.

Sect. 1st. Stallion 4 years old and upwards: 1st prize, Hon J. C. Abbott, Montreal. 2nd prize, John Clark, Nepean. 3rd prize, Thos Rodd, Cherry Hill.

Sect. 2nd. Stallion 3 years old: 1st prize, E. L. McDonald, Richmond. 2nd prize, Dominateur Lefebvre, St Remi

Sect. 3rd. Stallion 2 years old: 1st prize, John Burke, St. Columban. 2nd prize, J. C. Rainboth, Aylmer. 3rd prize, Amable Prévost, Varennes.

Sect. 4th. No Competition.

Sect. 5th. Filly 2 years old: 1st prize, Hugh McDonald, Côte St Luc, 2nd prize, G. B. Baker, Sweetsburg. Extra prize, E. D. Moore, Moore Station.

Sect. 6th. Brood Mare with Foal: 1st prize, O. Dionne, Rivière Ouëlle. 2nd prize, H. McCrimmor, Rivière Raisins. 3rd prize, Jas. Curry, Curry Hill.

Sect. 7th. Pair matched carriage Horses: 1st prize, Jos. Hickson, Montreal. 2nd prize, Dr. Craik, Montreal.

Sect. 8th. Pair matched Carriage Horses under 15½ hands: 1st prize, Hugh Paton, Montreal. 2nd prize, Dawes & Co. Lachine.

Sect. 9th. Single carriage horse in harness: 1st prize, B. J. Coghlin, Montreal. 2nd prize, Narcisse Beaudin, Russell Town. 3rd prize, Hector Lussier, St Vincent de Paul.

## SADDLE HORSES 3 YEARS OLD AND UPWARDS OVER 15½ HANDS

Sect. 10. Saddle horse not over 16 hands: 1st prize, M. H. Cochrane, Compton. 2nd prize, J. A. Duncan, Duncan Ville. 3rd prize, Dawes & Co Lachine.

Sect. 11. Hunter in Saddle over hurdles: 1st prize, Hunt Club, Montreal. 2nd prize, Tozer & Co. Quebec. 3rd prize, Hunt Club, Montreal.

## HORSES FOR AGRICULTURAL PURPOSES.

Sect. 1st. Stallion 4 years old and upwards. 1st prize, J. Bte. Brunet, St. Hyacinthe. 2nd prize, John Clark, Nepean. 3rd prize, Antoinette Vallée, St Martin

Sect. 2nd. Stallion 3 years old: 1st prize, F. F. Turner, St. Etienne. 2nd prize, Olivier Gagné, St. Remi. 3rd prize, J. & R. Beany, Montreal

Sect. 3rd. Stallion 2 years old: 1st prize, Wm. Murray, St. Stanislas de Kostka. 2nd prize, Jas. Henderson, Petite Côte 3rd prize, John Hannah, St. Laurent.

Sect. 4th. Filly 3 years old: 1st prize Jas. Drummond, Côte Visitation. 2nd prize, Jas. Henderson, Petite Côte. 3rd prize, Michel Raymond, Longue Pointe.

Sect. 5th. Filly 2 years old: 1st prize, J. S. Nesbitt, Petite Côte. 2nd prize, H. St. Aubin, St Laurent. 3rd prize, Wm. Traversie, St. Stanislas.

Sect. 6th. Brood mare, with Foal, over 1300 lbs: 1st prize, J. & S. Nesbitt, Petite Côte 2nd prize, Jas. Henderson, Petite Côte. 3rd prize, Etienne Benoit, St. Hubert.

Sect. 7th. Matched farm Team in harness: 1st prize, J. & S. Nesbitt, Petite Côte. 2nd prize, J. J. Roy, Sault aux Récollets. 3rd prize, Ls. Brosseau, St. Hubert.

## HEAVY DRAUGHT HORSES.

Sect. 1st. Stallion 4 years old and upwards. 1st prize, Alexis Moquin, Laprairie 2nd prize, Ls. Trudeau, St. Michel Archange. 3rd prize, B. Bernard, Longue Pointe

Sect. 2nd. Stallion 3 years old: 1st prize, Wm. Oswald, Belle Rivière. Sects. 3rd, 4th and 5th: No Competition.

Sect. 6th. Brood mare under 1300 lbs with foal: 1st prize, John Hannah, St. Lawrence. 2nd prize, Wm. Stuart, Petite Côte. 3rd prize, C. McEvoy, Petite Côte.

Sect. 7th. Span of heavy draught horses: 1st prize, Jas. Henderson, Petite Côte. 2nd prize, Robert Ness, Howick. 3rd prize, Wm, Nesbitt, Longue Pointe.

## OLYDESDALES.

Sect. 1st. Stallion 4 years old and upwards: 1st prize, Société d'Agriculture de Napierreville. 2nd prize, John Clark, Nepean. 3rd prize, David Riddle, Scotland.

Sect. 2nd. Stallion 3 years old: 1st prize, Thos. Brown, Petite Côte. 2nd prize, David Riddle, Scotland.

Sect. 3rd. No Competition.

Sect. 4th. Yearling Colt: 1st prize, Hugh McDonald, Côte St. Luc.

Sect. 5th. Filly 3 years old: 1st prize, Andrew Scott, St. Lawrence.

Sect. 6th. Filly 2 years old: 1st prize, J. & S. Nesbitt, Petite Côte. 2nd prize, Dawes & Co. Lachine.

Sect. 7th. Yearling Filly. 1st Prize, J & S Nesbitt, Petite Côte. 2nd prize, Thos. Brown, Petite Côte. 3rd prize, Dawes & Co Lachine.

Sect. 8th. Brood mare with foal by her side: 1st prize, Thos. Irving, Montreal. 2nd prize, Wm. McGibbon, Montreal.

Span of horses: 1st prize, Jos. Hickson, Montreal.

## FRENCHBONS.

Sect. 1st. Stallion 4 years old: 1st prize, Geo. A. Pierce, Stanstead. 2nd prize, Pierre Lussier, Verchères.

Sects. 2nd, 3rd and 4th: No Competition.

## SUFFOLKS.

Sect. 1st. Stallion 4 years old and upwards: 1st prize, Ohs. O. Gardiner, Charlotte Town P. E. I. 2nd prize, N. L. McGilvray, Montreal.

Sects. 2nd, 3rd and 4th: No Competition.

## SHETLAND PONIES.

Sect. 1st. Stallions: 1st prize, Jas. Richardson, Lachine. 2nd prize, Jas. Doran, Lachine.

Sect. 2nd. Mares: 1st prize, Thos. Irving, Montreal. 2nd prize, Alex. McGibbon, Montreal.

## PONIES OVER HURDLES.

1st prize, A. J. Sommerville, Lachine. 2nd prize, W. A. Reburn, St. Ann's.

## DONKIES.

1st prize, Jos. Hickson, Montreal 2nd prize, Capt. Riley, Longueuil. 3rd prize, Jos. Hickson, Montreal.

## 2ND CLASS.—CATTLE-DURHAMS.

Sect. 1st. Bull 4 years old and upwards: 1st prize, Geo. Whitefield, St. Athanase. 2nd prize, M. H. Cochrane, Compton. 3rd prize, M. A. Preston & Co. Ottawa.

Sect. 2nd. Bull 3 years old: 1st prize, M. H. Cochrane, Compton.

Sect. 3rd. Bull 2 years old: 1st prize, Daniel Brims, Athelston. 2nd prize, J. M. Browning, Longueuil. 3rd prize, Geo. Whitfield, St. Athanase.

Sect. 4th. Bull one year old: 1st prize, Geo. Fraser, Lachute.

Sect. 5th. Bull calf under 1 year: 1st prize, M. H. Cochrane, Compton 2nd prize, Jos. Hickson, Montreal. 3rd prize, M. H. Cochrane Compton.

Sect. 6th. Cow 4 years old and upwards: 1st prize, M. H. Cochrane, Compton. 2nd prize, Daniel Brims, Athelston. 3rd prize, C. O. Gardiner, Charlotte Town, P. E. I.

Sect. 7th. Cow 3 years old: 1st prize, M. H. Cochrane, Compton. 2nd prize, Daniel Brims, Athelston.

Sect. 8th. Heifer 2 years old: 1st prize, M. H. Cochrane, Compton. 2nd prize, Ohs. C. Gardiner, Charlotte Town. 3rd prize, D. Brims, Athelston.

Sect. 9th. Heifer one year old: 1st prize, M. H. Cochrane, Compton. 2nd prize, Daniel Brims, Athelston.

Sect. 10th. Heifer calf under 1 year: 1st prize, M. H. Cochrane, Compton.

Sect. 11th. No Competition.

## HEREFORDS.

Sect. 1st. Bull 4 years old and upwards: 1st prize, Jos. Hickson, Montreal.

Sects 2nd and 3rd. No Competition

Sect. 4th. Bull calf, highly commended: 1st and 2nd prizes, Jos. Hickson, Montreal.

Sect. 5th. No Competition.

Sect. 6th. Cow 3 years old: 1st and 2nd prizes, Jos. Hickson, Montreal.

Sects. 7th and 8th. No Competition.

## DEVONS.

Sect. 1st. Bull 4 years old and upwards: 1st prize, Geo. Whitefield, St. Athanase.

Sect. 2nd. No Competition.

Sect. 3rd. Bull 2 years old: 1st prize, Geo. Whitefield, St. Athanase. 2nd prize, Ivan Witherspoon, Montreal.

Sect. 4th. No Competition.

Sect. 5th. Cow 4 years old and upwards: 1st and 2nd prizes, Geo. Whitefield, St. Athanase.

Bull calf: 1st prize, Geo. Whitefield, St. Athanase. Highly commended. Sect. 6th. Cow 3 years old: 1st and 2nd prizes, Ivan Witherspoon, Montreal.

Sects. 7th and 8th. No Competition.

## AVESHIRE.

Sect. 1st. Bull 4 years old and upwards: 1st prize, Wm. Rodden, Plantagenet. 2nd prize, J. B. Dagenais, Ste. Rose. 3rd prize, Alfred Lesage, St. Jacques.

Sect. 2nd. Bull 3 years old: 1st prize, A. Mousseau, Berthier. 2nd prize, Jas. Sangster, Ormston. 3rd prize, G. H. Muir, St. Laurent.

Sect. 3rd. Bull 2 years old: 1st prize, Ls. Beaubien, Montreal 2nd prize, Thos. Irving, Montreal. 3rd M. H. Cochrane, Compton.

Sect. 4th. Bull one year old: 1st prize, John Hannah, St. Laurent 2nd prize, G. H. Muir, St. Laurent. 3rd prize, Wm. McGibbon, Montreal.

Sect. 5th. Bull calf under 1 year: 1st prize, Thos. Brown, Petite Côte 2nd prize, John Henderson, Petite Côte. 3rd prize, John Hannah, St Laurent.

Sect. 6th. Cow 4 years old and upwards: 1st and 2nd prizes, Thos. Irving, Montreal. 3rd prize, Jas. Drummond, Côte Visitation.

Sect. 7th. Cow 3 years old: 1st prize, Thos. Brown, Petite Côte. 2nd prize, Jas. Jeffrey, Petite Côte 3rd prize, Dawes & Co. Lachine.

Sect. 8th. Heifer 2 years old: 1st prize, Thos. Irving, Montreal 2nd prize, Wm. Rodden, Plantagenet. 3rd prize, Jas. Stephens, Front River.

Sect. 9th. Heifer one year old: 1st, 2nd and 3rd prizes, Thos. Irving, Montreal.

Sect. 10th. Heifer calf under one year: 1st prize, Jas. Jeffrey, Côte Visitation, 2nd prize, Thos. Irving, Montreal. 3rd prize, Wm. Rodden, Plantagenet.

Sect. 11. Herd of Ayrshire cattle: 1st prize, Thos. Irving, Montreal.

GALLOWAYS.

Sects 1st and 2nd. No Competition.

Sect. 3rd Bull 2 years old: 1st prize, Jos. Hickson, Montreal.

Sect. 4th. No Competition.

Sect. 5th. Cow 4 years old and upwards: 1st prize Jos. Hickson, Montreal.

Sect. 6th. Cow 3 years old: 1st prize, Jos. Hickson, Montreal.

Sect. 7th. Heifer 2 years old: 1st prize, Jos Hickson, Montreal.

Sect. 8th. Heifer 1 year old: 1st prize, Jos. Hickson, Montreal.

JERSEY OR ALDERNEY CATTLE.

Sect. 1st. Bull 3 years old and upwards: 1st prize, Geo Whitfield, St. Athanase. 2nd prize, Wm. McGibbon, Montreal. 3rd prize, H Stephens, St. Lambert.

Sect. 2nd. Bull 2 years old: 1st prize, Geo. Whitfield, St Athanase.

Sect. 3rd. Yearling bull: 1st prize, Wm. Robb, Coteau Landing. 2nd and 3rd prizes, W. A. Reburn, St Ann's.

Sect. 4th. Cow 3 years old and upwards: 1st prize, J. M. Browning, Longueuil. 2nd prize, Wm. Robb, Coteau Landing. 3rd prize, Geo. Whitfield, St. Athanase.

Sect. 5th. Heifer 2 years old: 1st prize, Geo. Whitfield, St. Athanase 2nd prize, H Stephens, St. Lambert. 3rd prize, J. M. Browning, Longueuil.

Sect. 6th Yearling Heifer: 1st prize, H. Stephens, St. Lambert. 2nd prize, Geo. Whitfield, St Athanase. 3rd prize, Ivan Wotherspoon, Montreal.

Sects. 7th and 8th. No Competition.

GRADE CATTLE.

Sect. 1st. Cow 4 years old and upwards: 1st prize, M. H. Cochrane, Compton. 2nd prize, J & S. Nesbitt, Petite Côte. 3rd. prize, R Elliot, St Jean-Bte. Village.

Sect. 2nd. Cow 3 years old: 1st prize, J. & S. Nesbitt, Petite Côte. 2nd prize, Wm. Rodden, Plantagenet.

Sect. 3rd Heifer 2 years old: 1st prize, Wm Stuart, Petite Côte. 2nd prize, Daniel Drummond, Petite Côte. 3rd prize, Wm. Rodden, Plantagenet.

Sect. 4th. Heifer 1 year old: 1st prize, Wm. Nesbitt, Longue Pointe. 2nd prize, Romuald Ducharme, St Marc.

FAT AND WORKING CATTLE ANY BREED.

Sect. 1st. Fat ox or steer: 1st prize, Tozer & Co Quebec.

Sect. 2nd Fat cow or heifer: 1st prize, M. H. Cochrane, Compton. 2nd prize, Tozer & Co. Quebec.

Sect. 3rd. Pair of Working Oxen: 1st prize, M H Cochrane, Compton. 2nd prize, Tozer & Co. Quebec.

3rd CLASS—SHEEP, LEISTERS

Sect. 1st. Ram, 2 shears and over: 1st prize, Jas. Cowan, Allan's Corner. 2nd prize, Robert Ness, Howick. 3rd prize, Jos. Gadbois, Terrebonne.

Sect. 2nd. Shearling Ram: 1st prize, John Hay, Lachuté. 2nd prize, Jas Cowan, Allan's Corner. 3rd prize, Toussaint Verdou, St. Laurent.

Sect. 3rd. Ram Lamb: 1st and 2nd prizes, Jas. Cowan, Allan's Corner. 3rd prize, Robert Ness, Howick.

Sect. 4th. 2 ewes, 2 shears and over: 1st prize, Jas. Cowan, Allan's Corner. 2nd prize, Rob. Ness, Howick. 3rd prize, Chs. Daunais, Terrebonne.

Sect. 5th. 2 Shearling Ewes: 1st and 2nd prizes, Jas Cowan, Allan's Corner. 3rd prize, Robert Ness, Howick.

Sect. 6th. 2 Ewe Lamb: 1st prize, Robert Robertson, Howick. 2nd prize, Jas. Cowan, Allan's Corner. 3rd prize, Chs. Daunais, Terrebonne.

COTSWOLDS.

Sect. 7th. Ram, 2 Shears and over. 1st prize, John Campbell, Noyan. 2nd prize, Chs. Robinson, Lacolle 3rd prize, Frs. Dion, Ste. Thérèse.

Sect. 8th. Shearling Ram: 1st prize, Peter Robinson, Lacolle 2nd prize, Chs. Robinson, Lacolle. 3rd prize, Julius Woodworth, Lacolle.

Sect. 9th. Ram Lamb: 1st prize, Julius Woodworth, Lacolle. 2nd prize, Peter Robinson, Lacolle. 3rd prize, Constant Monchamp, St. Michel Archange.

Sect. 10th. 2 Ewes, 2 Shears and over: 1st prize, Peter Robinson, Lacolle. 2nd prize, Julius Woodworth, Lacolle. 3rd prize, Chs. Robinson, Lacolle.

Sect. 11th. 2 Shearling Ewes: 1st prize A. Mousseau, Berthier. 2nd prize, Chs. Robinson, Lacolle. 3rd prize, Peter Robinson, Lacolle.

Sect. 12th. 2 Ewe Lambs: 1st prize, Julius Woodworth, Lacolle. 2nd prize, Peter Robinson, Lacolle.

OTHER LONG WOOLLED SHEEP.

Sect. 13th. Ram, 2 Shears and over: 1st prize, Ls Brosseau, St. Hubert. 2nd prize, Frs. Dion, Ste. Thérèse. 3rd prize, A. Mousseau, Berthier.

Sect. 14th. Shearling Ram: 1st prize, J. Bte. Dagenais, Ste. Rose. 2nd prize, Casimir Brosseau, Laprairie 3rd prize, Duncan McCall, St. Joseph.

Sect. 15th. Ram Lamb: 1st prize, J. Bte. Dagenais, Ste. Rose. 2nd prize, François Desjardins, Ste Rose. 3rd prize, Antoine Sicotte, St. Hubert.

Sect. 16th 2 Ewes, 2 Shears and over: 1st prize, Constant Monchamp, St. Michel Archange. 2nd prize, Robert Ness, Howick. 3rd prize, A. Mousseau, Berthier.

Sect. 17th. 2 Shearling Ewes: 1st prize, Jas. Cowan, Allan's Corner. 2nd prize, Frs. Desjardins, Ste. Rose. 3rd prize, A. Mousseau, Berthier.

Sect. 18th. 2 Ewe Lambs: 1st prize, Jas. Cowan, Allan's Corner 2nd prize, Antoine Sicotte, St. Hubert.

SOUTHDOWNS.

Sect. 12. Ram 2 Shears and over: 1st prize, H. D. Moore, Moore's Station. 2nd prize, Geo Nichols, Cataraqui. 3rd prize, H. D. Moore, Moore's Station.

Sect. 20th. Shearling Ram: 1st prize, Geo. Nichols, Cataraqui. 2nd prize, Ls Brosseau, St. Hubert. 3rd prize, H. D. Moore Moore's Station.

Sect. 21st. Ram Lamb: 1st prize, Geo. Nichols, Cataraqui. 2nd and 3rd prizes, H. D. Moore, Moore's Station.

Sect. 22nd 2 Ewes, 2 Shears and over: 1st and 2nd prizes, H. D. Moore, Moore's Station 3rd prize, Geo Nichols, Cataraqui.

Sect. 23rd. 2 Shearling Ewes: 1st, 2nd and 3rd prizes, H. D. Moore, Moore's Station.

Sect. 24th. 2 Ewes Lambs: 1st, 2nd and 3rd prizes, H. D. Moore, Moore's Station.

FAT SHEEP OF ANY BREED.

Sect. 25th Best 2 Wethers: 1st prize, Jas Cowan, Allan's Corner.

Sect. 26th. Best 2 Ewes: 1st prize, Geo. Smith, Lachine Rapids. 2nd prize, Robert Robertson, Howick. 3rd prize, Jas. Cowan, Allan's Corner.

4th CLASS. PIGS—IMPROVED BERKSHIRES

Sect. 1st. Boar over 2 years: 1st prize, Edward Kenny, St. Vincent de Paul. 2nd prize, Thos Irving, Montreal.

Sect. 2nd Boar over 1 year and under 2 years: 1st prize, A. Mousseau, Berthier 2nd prize, Richard Hanaford, Montreal. 3rd prize, Wm. Rodden, Plantagenet.

Sect. 3rd. Boar over 6 months and under 12 months: 1st prize, Dawes & Co., Lachine. 2nd prize, Wm. Evans, Montreal. 3rd prize W. A. Reburn, St. Ann's.

Sect. 4th Boar under 6 months: 1st prize, Wm. Rodden, Plantagenet, 2nd prize, A. Mousseau, Berthier. 3rd prize, Edw. Kenny, St. Vincent de Paul.

Sect. 5th Sow over 2 years: 1st prize, David Smeal, Mile End. 2nd prize, Mathew Moody, Terrebonne. 3rd prize, Dawes & Co, Lachine.

Sect. 6th. Sow over 1 year and under 2 years: 1st, 2nd and 3rd prizes, Dawes & Co, Lachine.

Sect. 7th. Sow over 6 months and under 12: 1st, 2nd and 3rd prizes Dawes & Co. Lachine.

Sect. 8th Sow under 6 months: 1st and 2nd prizes, Ed. Kenny, St Vincent de Paul. 3rd prize, Donald Campbell, St. Vincent de Paul.

SUFFOLKS AND OTHER SMALL BREEDS.

Sect. 1st. Boar over 2 years: 1st prize, Jos, Featherston, Credit Ontario. 2nd prize, J. A. Simpson, Coteau Landing. 3rd prize, Jos. Featherston, Credit, Ont.

Sect. 2nd Boar over 1 year and under 2: 1st and 2nd prizes, Jos. Featherston, Credit, Ont. 3rd prize, Featherston & Main, Credit.

Sect. 3rd. Boar over 6 months and under 12 months: 1st prize, Jos. Featherston, Credit. 2nd prize, Featherston & Main, Credit. 3rd prize, Jos. Featherston, Credit.

Sect. 4th. Boar under 6 months: 1st and 2nd prizes, Jos. Featherston, Credit. 3rd prize, Featherston & Main, Credit.



Sect. 5th. Sow over 2 years : 1st prize, Jos. Featherston, Credit. 2nd prize, Thos. Irving, Montreal. 3rd prize, Featherston & Main, Credit.

Sect. 6th. Sow over 1 year and under 2 years : 1st and 2nd prizes, Jos. Featherston, Credit. 3rd prize, Wm Rodden, Plantagenet.

Sect. 7th. Sow over 6 months and under 12 months : 1st and 2nd prizes, Jos. Featherston, Credit, Ont. 3rd prize, Featherston & Main, Credit, Ont.

Sect. 8th. No Competition.

Sect. 9th. Sow under 6 months : 1st and 2nd prizes, Jos. Featherston, Credit, Ont. 3rd prize, Featherston & Main, Credit, Ont.

#### Essex Pigs.

Sect. 1st. Boar over 2 years : 1st prize, Jos. Featherston, Credit, Ont. 2nd prize, Toussaint Verdon, St. Laurent. 3rd prize, Jos. Featherston, Credit, Ont.

Sect. 8th. Sow under 6 months : 1st and 2nd prizes, Jos. Featherston, Credit, Ont. 3rd prize, Olivier Beaudry, St. Alexis.

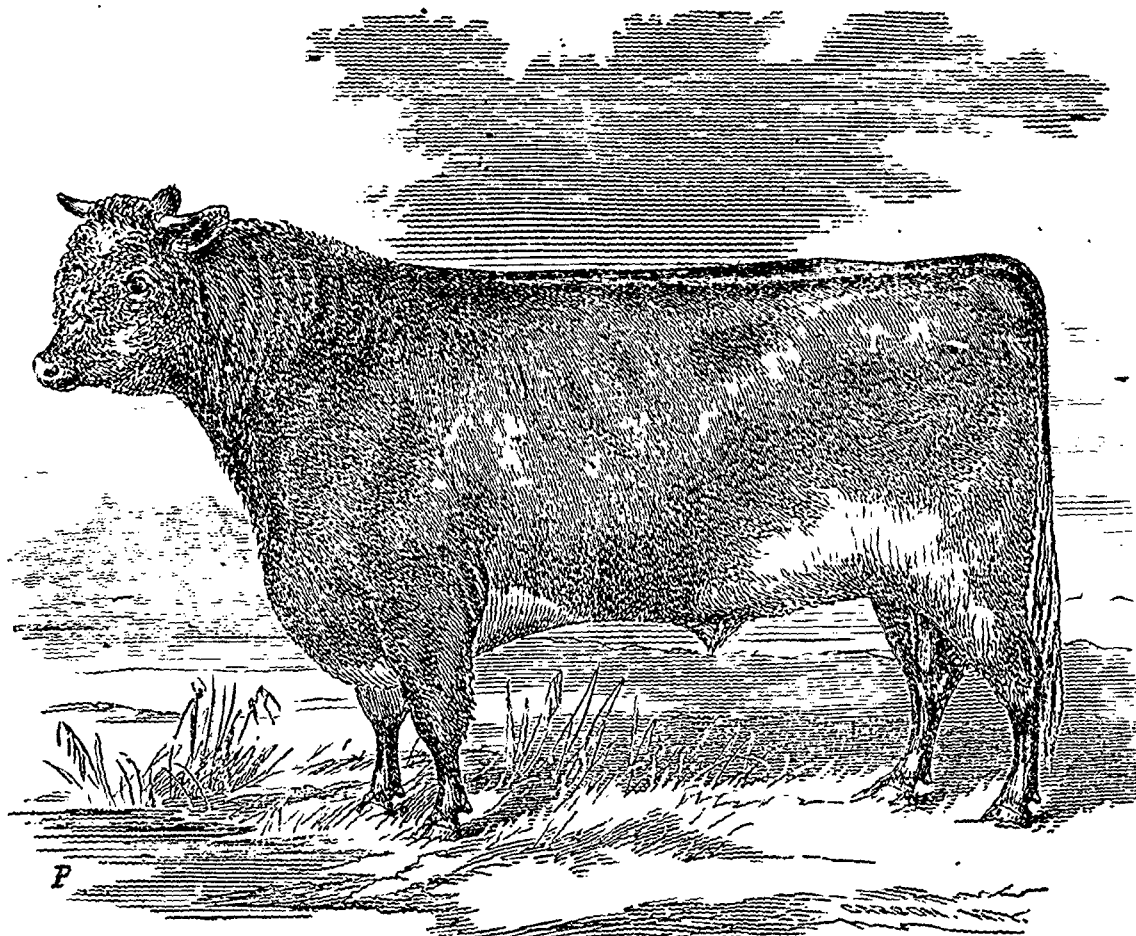
#### YORKSHIRE AND OTHER LARGE PORKS.

Sect. 1st. Boar over 2 years : 1st prize, Jos. Featherston, Credit, Ont. 2nd prize, Michel Raymond, Longue Pointe.

Sect. 2nd. Boar over 1 year and under 2 : 1st prize, Thos. Irving, Montreal. 2nd prize, Jos. Featherston, Credit.

Sect. 3rd. Boar over 6 months and under : 1st and 2nd prizes, Jos. Featherston, Credit, Ont. 3rd pr. , Wm H. Vaughan, St. John's.

Sect. 4th. Boar under 6 months : 1st prize, Jos. Featherston, Credit, Ontario. 2nd prize, Eloi Ouimet, St François de Salles. 3rd prize, Ludger Ouslette, Terrebonne.



Shorthorn Bull, Duke of Hillhurst 2.

Sect. 2nd. Boar over 1 year and under 2 : 1st and 2nd prizes, Jos. Featherston, Credit, Ont.

Sect. 3rd. Boar over 6 months and under 12 : 1st and 2nd prizes, Jos. Featherston, Credit, Ont.

Sect. 4th. Boar under 6 months : 1st and 2nd prizes, Jos. Featherston, Credit, Ont. 3rd prize, Toussaint Verdon, St. Laurent.

Sect. 5th. Sow over 2 years : 1st and 2nd prizes, Jos. Featherston, Credit, Ont.

Sect. 6th. Sow over 1 year and under 2. 1st and 2nd prizes, Jos. Featherston, Credit, Ont. 3rd prize, Donald Campbell, St. Vincent de Paul.

Sect. 7th. Sow over 6 months and under 12 : 1st prize, Jos. Featherston, Credit, Ont. 2nd prize, Toussaint Verdon, St Laurent. 3rd prize, Jos. Featherston, Credit, Ont.

Sect. 5th. Sow over 2 years : 1st prize, Jos. Featherston, Credit, Ont. 2nd prize, Michel Raymond, Longue Pointe. 3rd prize, Jos. Featherston, Credit, Ont.

Sect. 6th. Sow over 1 year and under 2 : 1st prize, Jos. Featherston, Credit, Ont. 2nd prize, Eloi Ouimet, St. François de Sales. 3rd prize, Jos. Featherston, Credit, Ont.

Sect. 7th. Sow over 6 months and under 12 : 1st prize, W. H. Vaughan, St. Johns. 2nd prize, Eloi Ouimet, St. François de Salles. 3rd prize, Jos. Featherston, Credit, Ont.

Sect. 8th. Sow under 6 months : 1st prize, Eloi Ouimet, St. Frs. de Salles. 2nd prize, Ludger Ouslette, Terrebonne. 3rd prize, Jos. Featherston, Credit, Ont.

#### 5th CLASS.—POULTRY.

Sect. 1st. Pair White Dorkings. No first prize. 2nd prize, Jos. Hickson, Montreal.

- Sect. 2nd. Pair silver grey Dorkings: 1st prize, Patrick Lunch Jr., Montreal. 2nd prize, Thos. Irving, Montreal.
- Sect. 3rd. Pair coloured Dorkings: 1st prize, Jos. Hickson, Montreal, 2nd prize, Thos. Irving, Montreal.
- Sect. 4th. Pair White Polands: No first prize. 2nd prize, W. J. Price, Montreal.
- Sect. 5th. Pair golden Polands: 1st prize, Jns. Black, Pointe St. Charles.
- Sect. 6th. Pair silver Polands: 1st prize, Jas. Black, Pointe St. Charles. 2nd prize, Jos. Hickson, Montreal.
- Sect. 7th. Pair white crested black Polands: 2nd prize, Jas. Black, Pointe St. Charles.
- Sect. 8th. Pair Plymouth Rock: 1st prize, Jos. Hickson, Montreal. 2nd prize, Thos Costeu, Montreal.
- Sect. 9th. Pair light Brahmas: 1st and 2nd prizes, Thos. Costeu Montreal.
- Sect. 10th. Pair Dark Brahmas: 1st prize, J. H. Cayford, Montreal. 2nd prize, Jos. Hickson, Montreal.
- Sect. 11th. Pair Buff Cochins: 1st prize, Jos. Hickson, Montreal. 2nd prize, Jas. Hooper, Mile End.
- Sect. 12. Pair White Cochins: 1st prize, W. B. Nantel, Montreal. 2nd prize, Jos Hickson, Montreal.
- Sect. 13th. Pair Partridge Cochins: 1st prize, W. B. Nantel, Montreal. 2nd prize, Thos. Hall, Outremont.
- Sect. 14th. Pair Houdans: 1st and 2nd prizes, Jos. Hickson, Montreal.
- Sect. 15th. Pair game Fowls, black breasted or other reds: 1st prize, Jas Black, Pointe St. Charles. 2nd prize, J. O. Nichols, Montreal.
- Sect. 16th. Pair game Fowls Ducking: 1st prize, Jas. Black, Pointe St. Charles.
- Sect. 17th. Pair game Fowls any other variety: 1st prize, Jas. Black, Pointe St. Charles. 2nd prize, J. C. Nichols, Montreal.
- Sect. 18th. Pair White Leghorns: 1st prize, Thos Hall, Outremont. 2nd prize, Geo McNier, Outremont.
- Sects 19th 20th and 21st No Competition.
- Sect. 22nd. Pair silver pencilled Hamburgs: 1st prize Wm Barrett, Montreal. 2nd prize, Jos Hickson, Montreal.
- Sect. 23rd No Competition.
- Sect. 24th. Pair silver spangled Hamburgs: 1st prize, Jos Hickson Montreal. 2nd prize, Henry Joice Chambly Canton.
- Sect. 25th. Pair Black Hamburgs: 1st prize, Jos Hickson, Montreal.
- Sect. 26th. Pair Seabright Bantams: 1st prize, Featherston & Main, Credit, Ont.
- Sect. 27th. Pair Bantams, black breasted and other reds. 1st prize, John Smith, Lachute Rapids. 2nd prize Jos Hickson, Montreal.
- Sect. 28th. Pair Ducking game Bantams: 1st prize, Jas. Black, Pointe St. Charles. 2nd prize, Chs Lumpkins, Côte des Neiges.
- Sect. 29th. Pair Bantams any other variety: 1st prize, Jos Hickson, Montreal. 2nd prize, Thos Costeu, Montreal.
- Sect. 30th. Pair Turkeys any colour: 1st prize, Featherston & Main, Credit, Ont. 2nd prize, C. F. Blanchard, St. Marc.
- Sect. 31st. Pair White Turkeys: 1st prize, H. D. Moore, Moore Station. 2nd prize, Jos Hickson, Montreal.
- Sect. 32nd. Pair Bremen Geese: 1st prize, Thos. Irving, Montreal.
- Sect. 33rd No Competition.
- Sect. 34th. Pair Geese, English grey and common: 1st prize, John Smith, Lachute Rapids.
- Sect. 35th. Pair Geese any other kind: 1st prize, H. D. Moore, Moore's Station. 2nd prize, H. Stephens, St. Lambert.
- Sect. 36th. Pair Aylesbury Ducks: 1st prize, Dan. Drummond, Petite Côte. 2nd prize, Geo. Nichols, Catarauqui.
- Sect. 37th. Pair Rouen Ducks: 1st prize, Geo. Nichols, Catarauqui. 2nd prize, Featherston & Main, Credit, Ont.
- Sect. 38th. Pair Ducks, any other kind: 1st prize, H. D. Moore, Moore's Station. 2nd prize, Toussaint Verdon, St. Laurent.
- Sect. 39th. Pair Guinea Fowls: 1st prize, Toussaint Verdon, St. Laurent.
- Sect. 40th. Pair Pea Fowls: 1st and 2nd prizes, Frs. Dion, St. Thérèse.
- Sect. 41th. No Competition.
- Sect. 42nd. Collection of Poultry: 1st prize, E. W. Benson, New Liverpool.

PIGONS.

- Sect. 43rd. Pair Carrier, Pouter, and Tumbler: 1st prize, Jas Hooper, Mile End.
- Sect. 44th. Jacobins, Fantails, Barbs, and Trumpeters: 1st prize, Jas. Hooper, Mile End.
- Sect. 45th. Collection Pigeons, any other kind: 1st prize, Jas. Hooper, Mile End.

RABBITS.

- Sect. 46th. Pair long eared Rabbits: Chs. Lumpkins, Côte des Neiges.
- Sect. 47th. Pair Common Rabbits: A. Z. Hélu, Montreal.

EXTRAS.

- 2nd prize, Jas. Black, Pointe St. Charles.

6th CLASS.—AGRICULTURAL IMPLEMENTS.

- Sect. 1st. Double Mould Plough: 1st prize, Geo. Jeffrey Bros., Petite Côte. 2nd prize, Jas. Patterson, Hochelaga.
- Sect. 2nd. Gang Plough: 1st prize, Wm Evans, Montreal. 2nd and 3rd prizes, Frost & Wood, Smith Falls.
- Sect. 3rd. Iron Beam Plough with Steel mould board, wooden handles: 1st prize, G. Wilkinson & Co, Aurora. 2nd prize, John Watson, Ayr. 3rd prize, Toronto Plough Works, Toronto.
- Sect. 4th. Iron Plough: 1st prize, Leon Rochon fils, St. Eustache. 2nd prize, Geo. Jeffrey Bros, Petite Côte. 3rd prize, Jas. Patterson, Hochelaga.
- Sect. 5th. Subsoil Plough: 1st prize, Wm. Evans, Montreal. 2nd prize, John Watson, Ayr.
- Sect. 6th. No Competition.
- Sect. 7th. Pair Iron Harrows: 1st prize David Ross, Huntingdon. 2nd prize, Alexander McGarth, North Georgetown. 3rd prize, Geo. Jeffrey Bros., Petite Côte.
- Sect. 8th. Pair wooden Harrows: 1st prize, Geo. Jeffrey, Bros., Petite Côte.



Shorthorn Fat heifer, 1st prize at the Smithfield Club show, 1878.

- Sect. 9th. Iron Roller: 1st prize, J. T. Miller & Son, Morisburg. 2nd prize, O. B. Mahan, Montreal. 3rd prize, Geo. Jeffrey Bros. Petite Côte.
- Sect. 10th. Wooden Roller: 1st prize, Frost & Wood, Smith Falls. 2nd prize, O. B. Mahan, Montreal. 3rd prize, Geo. Jeffrey Bros., Petite Côte.
- Sect. 11th. Horse Hoe, single horse cultivator, iron: 1st prize, Larmouth & Sons, Montreal, 2nd and 3rd prizes, Wm. Evans, Montreal.
- Sect. 12. Horse Hoe, single horse cultivator, wood: 1st and 2nd prizes, O. B. Mahan, Montreal. 3rd prize, Maxime Bougie, Bougie P. Office.
- Sect. 13th. No Competition.
- Sect. 14th. Sulky Horse Rake: 1st prize, M. Moody & Son, Terrebonne. 2nd prize, Frost & Wood, Smith Falls. 3rd prize, G. M. Cossitt Bros., Montreal.
- Sect. 15th. No Competition.
- Sect. 16th. Machine for cutting roots for Stock: 1st prize, Wm. Evans, Montreal. 2nd prize, M. B. & H. Jewell, East Farnham.
- Sect. 17th. Potato Digger: Geo. Jeffrey Bros. Petite Côte.

Sect. 18th. Straw Cutter: 1st prize, Wm. Evans, Montreal. 2nd prize, M B & H. Jewell, East Farnham  
Sect 19th Stump Extractor: 1st prize, Joshua Henshaw, St. Hyacinthe.

## STONE LIFTER.

1st prize, Jos. Filion, Ste. Thérèse.  
Sect. 20th Cider Mill & Press. 1st and 2nd prizes, Wm Evans, Montreal.  
Sect 21st. Collection of Agricultural Implements for field use. 1st prize, Frost & Wood, Smith Falls.

## GROUP 3.—AGRICULTURAL TOOLS AND IMPLEMENTS.

Sect. 1st. No Competition.  
Sect. 2nd. Set draining Tools. 1st prize, Wm. Evans, Montreal.  
Sect. 3rd. No competition.  
Sect 4th. Half dozen Spades. 1st prize, Wm. Evans, Montreal.  
Sect. 5th. " " Steel Hoes. 1st prize, L. N. Turner, Olera.  
Sect. 6th. " " Steel Shovels. 1st prize, Wm. Evans, Montreal.  
Sect. 7th. " " Grain Scoops. " "  
Sect. 8th. " " Manure Forks: 1st and 2nd prizes, Stafford & Holden, Barry, U. S.  
Sect. 9th Half dozen Spading Forks. 1st prize, Stafford & Holden, Barry, U. S.  
Sect. 10th. Seed Drill or Barrow for Turnips: 1st prize, J. W. Mann, Brockville. 2nd prize, Wm. Evans, Montreal. 3rd prize, Geo. Jeffrey Bros., Petite Côte.  
Sect. 11th. Machine for sowing grass seed: 1st prize, J. W. Mann, Brockville. 2nd and 3rd prizes, Wm. Evans, Montreal.  
Sect. 12th. Garden Walk or Lawn Roller: 1st prize, Wm Evans, Montreal. 2nd prize, Jas Smart, Brockville.  
Sect. 13th. Half dozen Scythes Sunitis. 1st prize, Dominion Sunitis Company, Sherbrooke. 2nd prize, H. E. Ketchum, Strathroy.  
Sect. 14th. Grain Cradle 1st and 2nd prizes, H. E. Ketchum Strathroy.

Sects. 15th and 16th. No Competition.  
Sect. 17th. Lawn Mowing Machine: 1st prize, Wm Evans, Montreal, 2nd prize, A Jones, Montreal.  
Sects. 18th, 19th and 20. No Competition.  
Sect. 21st. Fanning Mill: 1st prize, Wm. T. Dingie, Oshawa. 2nd prize, U. S. Robillard, Beauharnois. 3rd prize, Wm. McKenzie, Morrisburg.

Sect. 22nd. Cheese Press: 1st prize, Wm. Evans, Montreal.  
Sect. 23rd Churn: 1st prize, A D Cable, Montreal. 2nd prize, Wm. Evans, Montreal. 3rd prize, Jos. James & Co., Montreal.

Sect. 24th No Competition.  
Sect. 25th. Assortment of Factory Milk-cans and Pails: 1st prize, Hicks & King, Windsor Mills. 2nd prize S. & J. Ingalls, Sweetsburg. 2nd prize, Prentice & Fort, East Hardick. Extra 4th prize, Ls. Narbonne, St. Remi.

Sects. 26th and 27th. No Competition.  
Sect. 28th. Set Horse shoes: 1st prize, Montreal Rolling Mills, Montreal. 2nd prize, Jos. Lachapelle, Montreal.  
Sect. 29th. Ox yokes and Lows: 1st prize Wm. Evans, Montreal.  
Sect. 30th. Farm Gate: 1st prize, Wm. Evans, Montreal.  
Sect. 31st. Specimen farm-fence, wood. 1st prize, Goudron & Frères, Montreal.

Sect. 32nd Specimen wire fencing not less than 2 rods. 1st prize, Dominion Barb Wire Fence Company, Montreal. 2nd prize, Washburn & Main, Montreal. 3rd prize, Goudron & Frères, Montreal.

Sect. 33rd No Competition.  
Sect. 34th Assortment Agr. Tools for hand use, of Can. Man.: 1st prize, Wm. Evans, Montreal.

Sect 35th. Improved milk pans for not less than 10 cows: 1st prize, Martin & Bean, Montreal 2nd prize, Bori & Bromley, Chateauguay, 3rd prize, Z M Gelinas, Yamachiche.

Sect. 36th. Sap Evaporators for not less than 150 trees: 1st prize, A. J. Simpson, Montreal. 2nd prize, W. A. Morrison, Frelighsburg.

Sect. 37th. Sap buckets: 1st prize, " " "  
2nd prize, E. E. Spencer, Frelisburg.  
Sect 38th Sap Spouts: 1st prize, W A Morrison, Frelighsburg. 2nd prize, E. E. Spencer, Frelighsburg.

## 7th CLASS.—AGRICULTURAL PRODUCTIONS.

Sect. 1st. White winter wheat 4 minots: 1st prize, Roch. Simard, L'Assomption. 2nd prize, Jules Sauriol, St. Martin. 3rd prize, Daniel Drummond, Petite Côte.

Sect. 2nd. Red winter wheat 4 minots: 1st prize, Ovide Marion, St. Jacques L'achigan. 2nd prize, Frs. Demers, Chambly Bassin. 3rd prize, Alexis Prefontaine, Belœil.

Sect. 3rd White Spring wheat, 4 minots. 1st prize, Jas. Jeffrey Sr, Petite Côte. 2nd prize, Thos. Irving, Montreal. 3rd prize, Ovide Marion, St. Jacques L'achigan.

Sect. 4th. Red Spring wheat, 4 minots. 1st prize, J. & R. Benny,

Montreal. 2nd prize, Moise Vincent, St. Hubert. 3rd prize, Thos. Irving, Montreal.

Sect. 5th. Barley (2 rowed) 4 minots: 1st prize, Hugh McDonald, Côte St. Luc. 2nd prize, Thos. Irving, Montreal. 3rd prize, Thos. Morrin, Lachute.

Sect. 6th. Barley (6 rowed), 4 minots: 1st prize, Dame Vve. Lapointe, Longue Pointe. 2nd prize, David Martin, St. Esprit. 3rd prize, Jules Sauriol, St Martin.

Sect. 7th. Rye, 2 minots. 1st prize, Henri Pepin, L'Assomption. 2nd prize, David Martin, St. Esprit. 3rd prize, Fiddle Perreault, L'Assomption.

Sect. 8th. White oats, 4 minots: 1st prize, David Martin, St. Esprit. 2nd prize, Henri Pepin, L'Assomption 3rd prize, Ohs. F. Blanchard, St. Marc.

Sect. 9th. Black oats, 4 minots. 1st prize, David Martin, St. Esprit. 2nd prize Jules Sauriol, St. Martin. 3rd prize, Jas. Drummond, Côte Visitation.

Sect. 10th. Field peas, 4 minots: 1st prize, Jean Gagnon, St. Michel. 2nd prize, Jos. Delorme Fils, Côte St. Michel. 3rd prize, Frs. Demers, Chambly Basin.

Sect. 11th. Marrowfat peas, 2 minots: 1st prize, David Martin, St. Esprit. 2nd prize, Michel Raymond, Longue Pointe. 3rd prize, John Smith, Lachute Rapids.

Sect. 12th. Tares, 2 minots: 1st prize, David Martin, St. Esprit. 2nd prize, John Brodie, Côte St. Luc.

Sect. 13th. White field beans, 2 minots: 1st prize, Jos. Meloche, Ste. Geneviève. 2nd prize, D. Martin, St. Esprit. 3rd prize, Ls. Séguin, Rigaud.

Sect. 14th. Indian Corn in the ear white: 1st prize, Jules Sauriol, St. Martin. 2nd prize, Eloi Ouimet, St. Frs. de Sales. 3rd prize, Ohs. F. Blanchard, St. Marc.

Sect. 15th. Indian Corn in the ear yellow: 1st prize, J. N. Blackwood, West Shefford. 2nd prize, Thos. Irving, Montreal. 3rd prize, Thos. Hall, Outremont.

Sect. 16th. Timothy Seed, 2 minots: 1st prize, Antoine Lamarche, St. Esprit. 2nd prize, Jas. Dingwall, Williamstown. 3rd prize, Olivier Clairmont, Rivière du Loup.

Sect. 17th. Clover seed, 2 minots: 1st prize, Prosper Corbeil, St. Henri, Mascouche. 2nd prize, Jos. Lemire, St. Alexis.

Sect. 18th. Alsylke clover seed, 2 minots: 1st prize, Olivier Beaudry, St. Alexis. 2nd prize, Jos. Lemire, St. Alexis.

Sect. 19th. Hemp seed, 2 minots. 1st prize, David Martin, St. Esprit, 2nd prize, Olivier Beaudry, St. Alexis. 3rd prize, Jos. Lemire, St. Alexis.

Sect. 20th. Flax seed, 2 minots: 1st prize, D. Martin, St. Esprit. 2nd prize, Frs. Demers, Chambly Bassin. 3rd prize, Prosper Corbeil, Mascouche.

Sect. 21st. Mustard seed, 1 minot: 1st prize, Ant. Lamarche, St. Esprit. 2nd prize, David Martin, St. Esprit.

Sect. 22nd. Swedish turnip seed, 20 lbs.. 1st prize, Olivier Beaudry, St. Alexis. 2nd Ant. Lamarche, St. Esprit. 3rd prize, David Martin, St. Esprit.

Sect. 23rd. 14 lbs. White Belgian carrot seed: 1st prize, David Martin, St. Esprit. 2nd prize, Olivier Beaudry, St. Alexis. 3rd prize, Ant. Lamarche, St. Esprit.

Sect. 24th. 12 lbs. Long hed Mangold Wurtzel seed: 1st prize, David Martin, St. Esprit. 2nd prize, Olivier Beaudry, St. Alexis. 3rd prize, Ed. Ferland, Lanoraie.

Sect. 25th. 12 lbs. Yellow Globe Mangold Wurtzel Seed. 1st prize, Olivier Beaudry, St. Alexis. 2nd prize, Ant. Lamarche, St. Esprit.  
Sect. 26th. Bale Hops, 112 lbs.: 2nd prize, P. H. Mansfield, East Farnham.

Sect. 27th. Horse beans, 2 minots. 1st prize, J. & R. Benny, Montreal. 2nd prize, Thos. Irving, Montreal. 3rd prize, D. Drummond, Petite Côte.

Sect 28th. Buck wheat, 4 minots: 1st prize, Olivier Beaudry, St Alexis. 2nd prize, David Martin, St. Esprit. 3rd prize, Dame Vve. Lapointe, Longue Pointe.

Sect. 29th. Millet, 2 minots. 1st prize, David Martin, St. Esprit. 2nd prize, Ant. Lamarche, St. Esprit.

## ROOTS AND OTHER FIELD CROPS.

Sect. 1st. Garnot Chilis, Red, 1½ minot. 1st prize, Jean Gagnon, St. Michel. 2nd prize, J. & S. Nesbitt, Petite Côte. 3rd prize, Jos. Delorme Fils, Côte St. Michel.

Sect. 2nd. Garnet Chilis, White, 1½ minot: 1st prize, Thos. Irving, Montreal.

Sect. 3rd. Early Goderich potatoes, 1½ minot. 1st prize, Jos. Chartier, St. Guenard. 2nd prize, Wm. Stuart, Petite Côte. 3rd prize, Jos. Delorme Fils, Côte St. Michel.

Sect. 4th. Early Rose potatoes, 1½ minot: 1st prize, Jos. Delorme Fils

Côte St. Michel. 2nd prize, Jérémie Gagnon, Côte St. Michel.  
3rd prize, J. J. Roy, Sault aux Îlecollets.

Sect. 5th. Any other sort, 1½ minot: 1st prize, Thos. Hall, Outremont, 2nd prize, T. R. Hughes, Côte des Neiges. 3rd prize, Jas. Dingwall, Williamstown.

Sect. 6th. Collection of potatoes: 1st prize, Jas. Jeffrey, Petite Côte. 2nd prize, W. B. Davidson, Côte St. Paul. 3rd prize, John Smith, Lachute Rapids.

Sect. 7th. Swede turnips: 1st prize, Wm. Evans, Montreal. 2nd prize, J. & R. Benny, Montreal. 3rd prize, Ant. Lafont, Côte Visitation.

Sect. 8th. White Globe turnips: 1st prize, Ignace Morin, Côte des Neiges.

Sect. 9th. Aberdeen yellow turnips. 1st prize, Wm Darsh, Lachine.

Sect. 10th. 20 Roots red carrots: 1st prize, Ant. Lafond, Côte Visitation. 2nd prize, Rémi Pepin, L'Assomption. 3rd prize, W. B Davidson, Côte St. Paul.

Sect. 11th. 20 Roots white carrots: 1st prize, W. B Davidson, Côte St. Paul. 2nd prize, Henri Pepin, L'Assomption. 3rd prize, Thos. R. Hughes, Côte des Neiges.

Sect. 12th. Mangold Wurtzel Long Red: 1st prize, Wm Evans, Montreal. 2nd prize, T. R. Hughes, Côte des Neiges. 3rd prize Richard Hanaford, Papineau Road.

Sect. 13th. Red Globe Mangold Wurtzel: 1st prize, T. R. Hughes, Côte des Neiges. 2nd prize, Mathew Jeffrey, Longue Pointe.

Sect. 14th. Yellow Globe Mangold Wurtzel: 1st prize, T. R. Hughes, Côte des Neiges. 2nd prize, Wm. McGibbon, Montreal. 3rd prize, Dan Drummond, Petite Côte.

Sect. 15th. Long Yellow Mangold Wurtzel: 1st prize, T. R. Hughes, Côte des Neiges. 2nd prize, Dan. Drummond, Petite Côte. 3rd prize, Phos Irving, Montreal.

Sect. 16th. Kohl Rabi: 1st prize, Thos. Irving, Montreal. 2nd prize, Wm McGibbon, Montreal. 3rd prize, W. B. Davidson, Côte St. Paul.

Sect. 17th. Sugar Beet: 1st prize, Wm. Evans, Montreal. 2nd prize, John Brodie, Côte St. Luc. 3rd prize, Wm. Evans, Montreal.

Sect. 18th. Parsnips: 1st prize, T. R. Hughes, Côte des Neiges. 2nd prize, Ant. Lafond, Côte Visitation. 3rd prize, Richard Hanaford, Papineau Road.

Sect. 19th. Large pumpkins for cattle: 1st prize, Prosper Corbeil Mascouche. 2nd prize, Ignace Moran, Côte des Neiges. 3rd prize, John Brodie, Côte St. Luc.

Sect. 20th. Tobacco leaf, 20 lbs.: 1st prize, Ovide Marion, St. Jacques L'Achigan. 2nd prize, Rd. Ferland, Lanoraie. 3rd prize, Ed. Langlois, Quebec.

Sect. 21st. No Competition.

Sect. 22nd. Flax scutched, 112 lbs.: 1st prize, Olivier Beaudry, St. Alexis. 2nd prize, Jos. Gaddois, Terrebonne. 3rd prize, Ant. Lamarche, St. Esprit.

Sect. 23rd. Hemp, 112 lbs.: 1st prize, Fidèle Perreault, L'Assomption. 2nd prize, Roch Simard, L'Assomption.

EXTRAS.—COLLECTION OF ONIONS.  
1st prize, Wm. Evans, Montreal.

COLLECTION BLOOD BEETS.  
1st prize, Wm. Evans, Montreal.

COLLECTION OF TURNIPS.  
1st prize, Wm. Evans, Montreal.

8th CLASS.—DAIRY PRODUCTS.

Sect. 1st. 3 Firkins of Butter, factory or creamery, 56 lbs.: 1st prize, Saunders & McGill, Stockwell. 2nd prize, Boden & Wilson, Montreal. 3rd prize, J. S. Elliot, Lapigeonnière.

Sect. 2nd. Best firkin butter, private dairy, 56 lbs.: 1st prize, Geo. Whitfield, St. Athanase. 2nd John Martin, St. Andrews. 3rd prize, Olivier Clairmont, R. de Loup, (en haut). 4th prize, Ovide Marion, St. Jacques L'Achigan.

Sect. 3rd. Best butter, 28 lbs. for home use: 1st prize, J. Bte. Jodoin, St. Eléonore. 2nd prize, W. A. Reburn, St. Anns. 3rd prize, Robert Todd, St. Andrews. 4th prize, John Martin, St. Andrews.

Sect. 4th. Best factory Cheese, 30 lbs. white coloured: 1st, 2nd and 3rd prizes, Boden & Wilson, Montreal. 4th prize, Peter MacFarlane, Kelso.

Sect. 5th. Best Cheese, home made, 8 lbs. each: 1st prize, Archibald Rowat, Milestown. 2nd prize, Jas. Brodie, North Georgetown. 3rd prize, John Rowat, Milestown. 4th prize, Archibald Muir Sr., Huntingdon.

Sect. 6th. No Competition.

9th CLASS.—HONEY, SUGAR, ETC

Sect. 1st. Best package of Honey in the comb, 1 lb. or more: 1st prize, L. E. Taschereau, Quebec. 2nd prize, Wm Story, Plantagenet. 3rd prize, Ed. Greaves, Côte St. Antoine.

Sect. 2nd. Best package extracted honey, 1 lb. or more: 1st prize, Ed Greaves, Côte St. Antoine. 2nd prize, Jos. Chartier, St. Guénard. 3rd prize, David Reay, Hudson.

Sect. 3rd. No Competition.

Sect. 4th. Best Colony Italian Bees: 1st prize, J. Bts. Lamontagne, Montreal.

Sect. 5th. No Competition.

Sect. 6th. Best show of Beeswax: 1st prize, David Reay, Hudson. 2nd prize, J. Bte. Lamontagne, Montreal.

Sect. 7th. Best bee hive for all purposes: 1st prize, L. E. Taschereau, Quebec. 2nd prize, Ed Greaves, Côte St. Antoine. 3rd prize, J. Bte. Lamontagne, Montreal.

EXTRA PRIZES.—BUTTER TESTERS.  
1st prize, R. Donaldson, Montreal.

EXTRA PRIZES.—CITIZENS' PRIZES.

Hunters over Hurdles, heavy weights: 1st prize, Capt. Campbell, St. Hilaire. 2nd prize, B. J. Coglein, Montreal. 3rd prize, Jos. Hickson, Montreal.

Hunters over Hurdles, light weights: 1st prize, Wm. Drysdale, Montreal. 2nd prize, D. Morice, Montreal. 3rd prize, Tozer & Co., Quebec.

Farmers, hunters over Hurdles, any weight: 1st prize, Jas. Drummond Petite Côte. 3rd prize, Jas Henderson, Petite Côte.

EXTRA PRIZES.

Dray horses, matched Teams: 1st and 2nd prize, The Shedden Co., Montreal.

PONIES.  
1st prize, O. E. Dawson, Montreal.

Hon. M. H. Cochrane, Compton: His Excellency's Gold medal to Exhibitor obtaining most prizes for cattle.  
Dawes & Co., Lachine; His Excellency's Silver medal to Exhibitor obtaining most prizes for Horses.  
Jos. Featherstone, Credit, Ont. His Excellency's Bronze medal to Exhibitor obtaining most prizes in Sheep and swine.  
True copy certified.

GEORGES LECLERE, Secretary.  
Council of Agriculture P. Q.

**POULTRY DEPARTMENT.**

*Under the direction of Dr. Andres, Beaver Hall, Montreal.*

We give a sketch of a movable fence, taken from the P. Yard, which has been used by Mr. Calvin Rogers, who is very pleased with it, and finds it easily moved from place to place, as well as economical.

In the sketch Fig. 1 is a section of fence 12 feet long, nailed together, ready to hang up. Fig. 2 is two sections hung upon the stakes, and shows the fence finished. Fig. 3 is a stake, showing the hooks on which the sections hang. The scale is one-quarter inch to the foot. Fig. 1 is a section 12

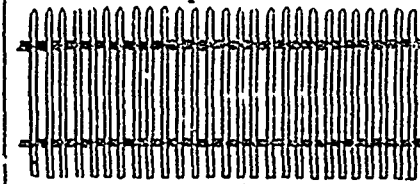


Fig. 1.

feet long, although the length may be varied from that length or less, to 15 feet. The rails are 2 x 3 joist; slats 5 feet long by 1 inch square. We use spruce fence pickets, 3 inches wide, sawed into three. The space between slats is 3 inches. You will see that one 3-inch picket made into three, covers a foot of rail, just twice as much as if put on whole, a saving of one-half in lumber; but the expence of sawing and extra nails takes up one half, perhaps, of what is saved in stock. One 8p. nail to a bearing is ample to hold on the slat, but to prevent racking in handling, a few slats in each section have two nails to a bearing.

Fig. 3 is a stake 5½ feet long, and as large as can be conveniently driven into the ground about 20 inches or more, after making a hole with an iron bar: about 4 in. in diameter is a good size. Such a stake would be hardly stout enough to hold a fence with 3-inch pickets, but for this light fence it is ample, as inch pickets hold scarcely any wind. It is like trimming the quill feathers of a hen's wings to prevent flying. The hooks, as shown, are of ¾ square iron, cut into proper lengths, one end turned up ¼ an in., the other end not pointed, but the corners beat down just enough to prevent

carrying the wood before it in driving. We now use *cut spikes* instead of hooks, costing less than one cent each. The head of a spike is not quite large enough to hold the rail, but by tying a rope yarn around the stake and nail it is perfectly safe, thus saving expense. In setting up the fence we stretch a line for the stakes, lay the sections along, and set the stakes,

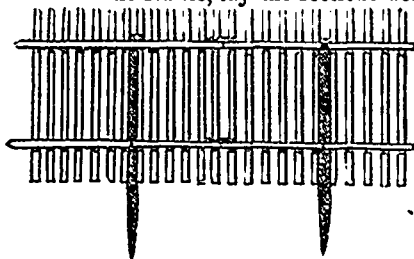


Fig. 2.

two to each section, as shown in the sketch, about 2 to 2½ feet from the end of the section, so as to prevent sagging in the middle. The stakes are driven, and a line stretched for the upper hooks or nails. After driving the hooks, the sections are hung up, and the lower hooks driven under the lower rail. The rails butt together, and to steady them and keep the fence in a line, we tack a narrow strip of board about 1½ feet long across joint, as shown in the sketch. You will see that the labor of setting up such a fence is almost nothing, and to remove and set it again is but a trifle. It is only to pry off the strips across the joints, lift off the section, pull up the stakes and it is ready to set up again. We claim for this fence: 1st, it is cheap, as it requires but little stock, the stakes not costing half as much as posts, which would require *digging* to set them; 2nd, it is light, and holds next to no wind, and will *always* stand up; 3rd, if well made, it is very handsome; and 4th, it is very easily removed from place to place.

The object in sending this to you is that we think it is, on the whole, the best style of movable fence that we have seen, or heard of, and that the plan would be valuable to any one wanting a movable fence.

The stakes, such as I have described, if taken from wood suitable for stakes, will last 4 or 5 years, and can easily be replaced as they are not connected with the rails. Judging from the durability of a picket fence made of spruce on my farm 20 years ago, I conclude that this fence will last, if no sap is used, 20 years; and if a coat of whitewash is applied occasionally, it will last much longer. We have between four and five hundred feet of this fence in use. One of our yards contains nearly an acre of land. A large part of the fence for that is of a different kind. It is the original fence of the lot—a stone wall with a rail added.

Fig. 3

#### HINTS.

October and November are the closing months in the year when the moulting of fowls generally takes place. With full grown fowls it is the most critical time. The sexes should be kept apart, particularly the larger species and during this time they should be well fed on good, sound and nutritious food, not that which will accumulate too much fat, but which will keep up the extra demand of nature at this time. Granulated bone, wheat, oats, crushed corn, and a good supply of green food, such as cabbages, mangolds, carrots, and a moderate use of cooked meat will keep them in good condition, the food being varied every few days. Chopped onions will be found to be an excellent vegetable, to use occasionally, if given too often, both flesh and egg, will become impregnated with the flavor, to a great degree, which would be undesirable to many persons.

#### Poultry Keeping.

Is it profitable? How many can answer that question in a satisfactory manner? I wish every one who can, would, for

the benefit of those who can not. Of course, if you keep a large flock of hens that trample down your grain and scratch up your garden, and you only get a half dozen eggs a day, your common sense tells you that they are a damage to you; but if you get "quite a good many eggs," and they bring a pretty good price, usually, you have a vague idea that they are profitable, although you don't know any thing about it. If any reader of the *Farmer* would for one year keep a strict account of every dozen of eggs sold, and the price of every chicken raised, and all the eggs used by the family, and an equally strict account of the actual cost of keeping, and then give the public the benefit of their experience, the question would be answered. We find poultry keeping profitable on a small scale, but have doubts about a larger one. We have thirty-five hens of the Light Brahma breed. We prefer this breed because they are good layers, do not wander, and the chickens mature early and weigh heavily. They have a warm, well-lighted house, kept very clean, in which to roost and lay. Their regular food is a mixture of corn and barley, and about every other day a six-quart pail of sour milk thickened with oat or corn meal. Every day they are supplied with about a half bushel of coal ashes to wallow in (a sure preventive for lice), and are watered as regular as the horses. About once a week they get a pound or two of scraps from the butcher, and they get all the scraps from the table, besides cabbage leaves, potato and apple parings chopped fine, and are constantly supplied with lime. The result is, they lay regularly all winter; we sell fresh eggs at the highest price every month in the year, and have abundance for our own use. The cost of keeping does not exceed two dollars, any month, and sometimes falls far below that figure.—*Old Maid, in Ohio Farmer.*

#### Plymouth Rocks.

Fanny Field, a first rate authority on poultry, says in the *Practical Farmer*:—As a market-fowl, the Plymouth Rocks stands at the head of the list. The Rocks hold the same place in American markets that the Dorking holds in the English. I do not say this because somebody else has said it and the Rocks are in fashion, or because I happen to be a breeder of this variety, but because I know it. As I remarked before, I do not raise chickens to look at, nor for the fun of the thing, but for cash. And do you think that I would keep on raising Plymouth Rocks year after year, unless I could make it pay? Not I! The poultry raiser who makes a business of raising chickens for market, and who expects to get his daily bread and butter from the profits on his chickens, wants a breed that as chicks will be sprightly, up and scratching, from the shell, hardy, and feather up quickly. As fowls, they must be good, but not everlasting sitters; good mothers; must lay on flesh rapidly when fattening for market, must weigh when dressed from five to eight pounds, be of good shape, with a good proportion of breast meat, and must have yellow skin, and smooth, yellow legs. The Plymouth Rocks possess all these good qualities, which make them about all that can be desired in a market fowl. "But," says somebody who is bound to find fault. Didn't A. B., in *The Farmer* of May 1, declare that his Rocks were inveterate sitters, and minus the yellow legs, and didn't come half way up to the standard, anyhow?" Yes, but I am not talking about "standard" Rocks just now, I am going around to that after a while. A. B. was unfortunate in having Plymouth Rocks that were "inveterate sitters," but we must not condemn the whole race because one man had bad luck with them. I have a Plymouth Rock hen three years old who never offered to sit; but I should not, on the strength of that one bid, venture to assert that the Rocks are non-sitters. Somebody else says that the Plymouth Rocks all died off, while his Leghorns escaped; therefore, he concludes, the

Rocks are not hardy. His experience is entirely off-set by that of a prominent Western breeder, who lost his Cochins and common fowls from cholera, while none of his Rocks died. After the impartial testimony of hundreds of Plymouth Rock breeders, who consider the Rocks the hardiest variety of fowl that we have, it seems hardly worth while for me to occupy much space in arguing that point. I do not consider the Rocks proof against disease by any means, but they come about as near it as any variety that I know of. Somebody else who is not posted on the subject exclaims, "Well, at any rate, in market a pound of chicken meat is a pound, black legs, yellow, or white. I don't see how you can get around that." If you have ever studied market reports, and use your eyes, ears and tongue around markets and commission houses as well as I have, you would not assert so positively that "a pound is a pound." Did you ever happen to see in market reports the words "prime stock" and "poor unsalable lots?" Do you know what they mean? I do. The first means quick sale at the top market price, and the last means slow sale at any price the purchaser offers. Commission men think themselves lucky to get these "poor, unsalable lots" off their hands at any price. No longer ago than last winter, I was in a big commission house talking to a member of the firm and keeping an eye on the dealers who came in to buy. "There," said Mr. E. as a keen eyed man came in, "is one of the best judges of dressed poultry that I ever saw. Come and see what he buys." I went and I saw two boxes—one containing 178 pounds, and the other 200 pounds of dressed poultry—all Plymouth Rocks, dressed in a good shape and neatly packed. "I buy to sell again," said the keen-eyed man, "and I have some of the best customers in the city. I aim to please them, and I find that these plump, yellow-skinned birds suit them to a T. I couldn't give away such a lot as that," touching a box close by. I examined "that lot," and found it made up of all sorts, sizes and colors; some had white skins, some yellow, but the greater part were dark-legged and the skin was of that blueish tint that reminds one of boarding-house chicken. There was some good poultry in the package, but it was mixed in with so much that was poor that, taken altogether, it made a "poor, unsalable lot." And I have noticed in market, that people who were buying chickens for broilers would willingly pay more for a small chicken well feathered up than for one a third larger that was covered with pin feathers and had that scraggy, awkward look peculiar to chickens who are still in their "short clothes." This early feathering and quick growth are two of the chief things which make the Plymouth Rocks so desirable for early market chicks.

#### Technical Terms.

There are very many persons who are familiar with poultry, their general appearance and common habits, and yet wholly unacquainted with the recently introduced terms as applied to fowls; words and meaning of which thus used is Greek even to those well informed on general subjects. For the benefit of those who may desire to obtain the knowledge, I subjoin a glossary of technical terms, derived from the best authorities:

**Beard**—A bunch of feathers under the throat of some breeds of chickens, such as Houdans or Polish. There are many phrases, such as breed, brood, brooding, carriage, etc., that even the least unlearned will understand. We often hear of a "litter of chickens," or similar expressions. Litter as applied to chickens, is inelegant and in bad taste. We hear of a litter of pigs, a litter of kittens, etc., but a litter of chicks is entirely out of keeping. **Carunculated**—covered with small fleshy protuberances, as on the head and neck of a turkey cock. **Chick**—A newly-hatched fowl. **Chick**—This word applies indefinitely to any age under one year old.

**Clutch**—This term is applied both to the batch of eggs sat upon by a fowl, and to the brood of chickens hatched therefrom.

**Cookerel**—A young cock. A cockerel does not truly become a cock until eighteen months of age, although he is generally thus termed at the age of one year. Not until a year and a half old does he get his final moult, and attain to the full glory of plumage and size. Cookerels have many deficiencies that disappear when they emerge into full-grown, full-plumed cocks. Then they become exhibition birds with some trimming, and yet may be poor birds to breed from. It does not always follow that a bird is suitable for breeding purposes simply because he or she has won a prize. Many imperfections that presented themselves in the chicken may grow out, but the offspring of such birds generally repeats the discrepancy. Imperfect plumage may grow out or be plucked, and other points be concealed by a covering of flesh. Exhibition birds do not always become so without aid. Nature is often assisted by art in this respect as well as others.

**Comb**—The fleshy protuberance growing on the top of the fowl's head. **Condition**—The state of the fowl as regards health and beauty of plumage. **Crest**—A crown or tuft of feathers on the head, of the same significance as top-knot. **Crop**—The receptacle in which the fowl's food is stored before passing into the gizzard for digestion. **Cushion**—The mass of feathers over the rump of a hen, covering the tail—chiefly developed in Cochins. **Dubbing**—Cutting off the comb, wattles, and ear-lobes, so as to leave the head smooth and clean. **Ear-lobes**—The folds of bare skin hanging just below the skin, by many called deaf ears. They vary in color, being red, white, blue and cream-colored. **Face**—The bare skin around the eye. **Flights**—Primary feathers of the wing used in flying, but tucked under the wings out of sight when at rest. **Fluff**—Soft, downy feathers about the thighs, chiefly developed in Asiatics.

**Furnished**—when a cockerel has obtained his full tail, comb, hackles, etc., he is said to be furnished. **Gills**—This term is often applied to the wattles. **Hackles**—The peculiar, narrow, long feathers on the necks of fowls. **Henny, or Hen-feathers**—Resembling a hen, from the absence of hackles and sickle feathers, and in plumage generally. **Hook**—The joint between the thigh and shank. **Keel**—A word sometimes used to denote the breast-bone. **Leg**—In a living fowl, this is the scaly part, usually denominated the shank. In a dressed bird, the term refers to the joint above. **Leg-feathers**—Feathers growing on the outer sides of the shanks in many of the Asiatics. **Mossy**—Confused or indistinct markings in the plumage.

**Pea Comb**—a triple comb resembling three small combs in one, the middle being the highest. **Penciling**—small markings or stripes over the feather. These may run straight across, as in the Hamburgs, or in a crescent form, as in Partridge Cochins. **Poult**—a young turkey. **Primaries**—the flight feathers of the wings, hidden when the wing is closed, being tucked under the visible wing, which is composed of the "secondary" feathers. Usually the primaries contain the deepest color belonging to the fowl, except the tail, and great importance is attached to their color by breeders. A cockerel, or a pullet of some breeds, should never show a white quill, or a white shaft to a quill, to become perfect breeding birds.

**Pullet**—a young hen. The term is not properly applicable after a bird is a year old. **Saddle**—the posterior part of the back, reaching to the tail in a cockerel, and answering to the cushion in a hen; cushion, however, being restricted to a very considerable development, as in Cochins, while saddle may be applied to any breed. **Secondaries**—the quill feathers of the wings which are visible when the wings are folded.

Self-color—a uniform tint over the feather. Shaft—the stem or quill part of a feather. Shank—the lower and scaly joint of the leg. Sickles—the long curved feathers of a cock's tail, properly applied only to the top pair, but sometimes used for one or two pairs besides. Spangling—the marking produced by a large spot or splash on each feather, differing from the ground color. Squirrel-tailed—the tail projecting in front of a perpendicular line over the back. Stag—a term used for a young cock; chiefly employed by Game fanciers. Station—an ideal standard for Games, embodied in style and symmetry. Strain—a race of fowls that has been carefully bred by one breeder or his successor for a number of years, and has acquired an individual character of its own. Symmetry—perfection of proportion, often confounded with carriage, but quite distinct, as a bird may be nearly perfect in his proportions and yet "carry" himself awkwardly. Tail-coverts—the soft, glassy, curved feathers at the sides of the lower part of the tail, usually of the same color as the tail itself. Tail-feathers—the straight, stiff feathers of the tail only, the top pair are sometimes slightly curved, but they are generally nearly, if not quite straight, and are contained inside the sickles and tail-coverts. Thighs—the joints above the shanks, the same as the drum sticks in dressed fowls. Top-Knot—same as crest. Under color—the color of the plumage, seen when the surface has been lifted. It is manifested chiefly in the down seen about the roots of the feathers. Vulture-hock—stiff, projecting feathers at the hock joint. The feathers must be both stiff and projecting to be thus truly called and condemned. Wattles—the red, depending structures at each side of the base of the beak, chiefly developed in the male sex. Web—the web of a feather is the flat or plume portion, the web of the feet, the flat skin between the toes; of the wings, the triangular skin seen when the wings are extended. Wing-bars—long lines of dark color across the middle of the wings, caused by the color or marking of the feathers, known as the lower wing-covert. Wing-bows the upper or shoulder part of the wings. Wing-points or wing-butts—the ends of the primaries. Wing covers—the broad feathers covering the roots of the secondary quills. Wry-tailed—crooked tailed; a deformity.

The study of poultry is becoming extended daily, and it not only is instructive and agreeable, but useful. A dozen fresh eggs at New Year, in years back, have been unknown. Now, a breakfast of fresh eggs is not an uncommon or unknown thing. The old-fashioned barn-door fowls have disappeared with our forefathers, and the old "speckled" hen no longer steals her nest. Instead, we have spangled, mottled and pencilled. A love of fine poultry has gradually crept in.

Many who indulged in new breeds have met with disappointment, and are ready to denounce the poultry business as a humbug. The cause lies, perhaps, partly with the purchaser and partly with the seller. Inferior specimens are too often palmed off on distant customers, by means of extensive advertisement, as first-class. Of course, the progeny of these birds is imperfect, and does not come up to the standard qualifications in any respect. We are gradually approaching an era in poultry breeding, and gaining knowledge that will surely prevent cheating by so called poultry breeders. A previous thorough acquaintance with the requisite qualities and points of the variety we desire, will spare us much loss and mortification. We must not only look at the points of the parent birds, but inquire into the generation gone before. Bad points, as well as good ones, are transmitted to the progeny. Any discrepancy in the plumage is a sure indication of bad breeding.—C. B., in *Country Gentleman*.

## ITALIAN BEES.

It is an acknowledged fact among bee-keepers, that the Italian bee is much more active in work and quieter in manners than the ordinary honey maker. Such is the peculiarity of the quaint little creatures in the procreation of their species, that to change the sort it is only necessary to change the prolific mother of the race. All you have to do, if you want to Italianise a hive, is to take away the old Queen and replace her by an Italian Queen.

To do this, as Mrs. Glasse recommends in her "Cookery-book," article, "how to dress a hare:" first catch her (fig. 1) In the old straw hives this would be a difficult task; but

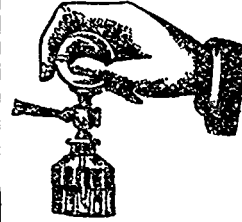


FIG. 2.

now, it is reduced to a very simple affair: take off the top of the box as quietly as possible, and raising each frame, one by one, examine them carefully until you find the Queen, and when you have found her, place her in a cage or any other handy receptacle, if you think you may want her. Replace, now, the frames, and put the cage in which you have confined the Italian Queen between the two middle frames, and close the hive. A skilful operator will not take more than 4 or 5 minutes about the job. For, eight hours afterwards, let loose the new mistress of the drones, and watch the reception she meets with. If they tease her, by getting on her back, pulling her wings or her legs, &c., withdraw her for another thirty six hours, or so, when she will be, generally speaking, received with acclamation.

Sometimes, it is well to sprinkle the stranger with a little sugar and water scented with peppermint. (fig. 2) Bees have great power of smell, and are easily shocked.

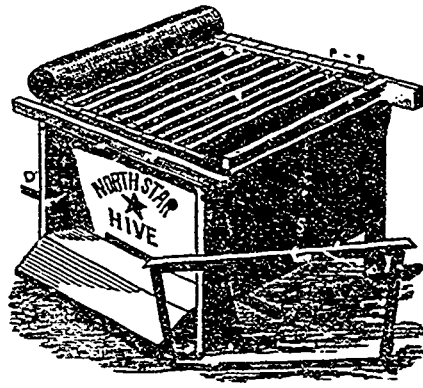


FIG. 1.

hive will be Italians!

*Management of Bees in winter.*—If Bees were *autotronics*, or "to the manor born," in this country, there would be little trouble in preserving them in winter; but as they are *indigenæ* of a warmer climate, it is necessary to accommodate their retreat to their natural habits.

The great thing is to keep them as torpid as possible: that is to prevent any great change of temperature from occurring during their retirement from active business. The less they move about the less food will they require; and when we consider that each hive will consume from 25 lbs. to 30 lbs. of honey, or its equivalent in syrup, and that the colder their retreat is the more food they will want to supply the warmth necessary to their existence, we shall easily see that, as with cattle, so with bees, a moderate but regular degree of warmth is the best.

The hives should be placed in a dark cellar, capable of being kept at, or about, 55° F. by means of ventilators; and the covers being removed, their place should be taken by

It is astonishing how the sale of Italian Queens has increased of late years. Many a bee-keeper sends out from 6,000 to 10,000, a year, and the strange thing is, that in six weeks from the introduction of one of them into a hive of common bees, all the then inhabitants of the

close canvas nailed on the top of the frame, (fig. 3). The old straw hives must be placed upside down, and the canvas tied over the bottom. The bees will thus have an apartment which will enjoy the advantage of being moderately warm and at the same time dard and dry.

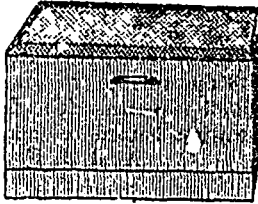


FIG. 3.

If extra food should be necessary, it may be given in small boxes placed at the exit hole, so that the bees may neither go out themselves, nor suffer from the rapacious propensities of their neighbours (fig 4).

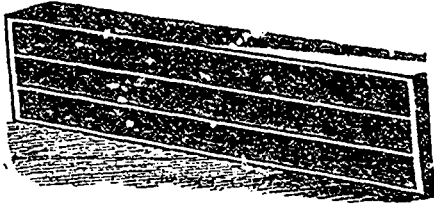


FIG. 4.

When the bees have fed, close the exit hole sufficiently to keep them in the hive.

**Fruit Growers Association of Abbotsford.**

This association held its Fifth Annual Exhibition of fruits, flowers, and vegetables, at Abbotsford, on 24th September.

The display of fruits was more varied than ever, and contained many new varieties never seen amongst us before, and some of great promise of usefulness.

The chief attraction this year was the display of outdoor grapes, which far surpassed any yet gathered in this Province. Of White Grapes alone, there were no less than 27 kinds; of red, 10 kinds; of black, 35; making a total of 72 different varieties upon the Exhibition tables, and a total of 150 plates. Besides this, 7 more arrived after the Exhibition, making a total of 79 kinds which have passed before the notice of our Fruit Committee. For, now that it has been proved beyond all doubt that there is heat enough in this climate, between frost and frost, to grow really good grapes and to ripen them with certainty, it has become necessary, that is a necessity to fair progress, to gather together all the old and tried, and all the new and promising kinds, and place them side by side for study and comparison. Many of these new varieties were sent by their originators distances of 300 miles and upwards.

The Fruit Committee has been at work. The greater part of the collection has been laid out where it has been used as a book of reference for the last four weeks, and it is to be hoped that all this labor will result in good, reliable lists.

These we hope to send to the Journal, but later.

Of apples there were about 360 plates, less than for the last three years, on account of changes in our Prize list, in the seedling collections. The assortment however was the largest yet. Inclusive of 9 kinds of Crab Hybrids, it numbered 110 varieties.

Eilwanger and Barry, of Rochester, N. Y. sent a very fine collection. The specimens were truly magnificent, and were much admired by all. It contained 25 kinds of pears, 31 of apples, and 18 of grapes. The pears were remarkably fine, well formed, well colored, huge specimens, showing what could be done by care and culture in a climate more favorable than our own. The kinds were almost unknown to any one, though all, except one, have been tested on the slopes of Montreal Mountain by the late Jas. H. Springle, and 7 of them did well, 11 fairly well, and only 6 proved failures. Mr. Springle tested, it is said, about 300 kinds of pears, and it is well that his experience has been recorded, tho' not generally known. Those interested in this matter should consult Montreal Hort.

Soc 1st Report, p. 22, and either Ont. F. G. Assoc. Report 1871, p. 28, or Canada Farmer, July 15th and Aug. 1871.

The grapes from Messrs. Eilwanger and Barry were also unusually fine, and all but two kinds suitable for culture here. Seven of them had been fruited in Abbotsford. To compare theirs along side of our own was most interesting. Ours were fine, of form without doubt, yet theirs in size and form of bunch, and in berry, were far ahead of ours. In fact, we were over-matched: over-matched, not by their superior climate, but mainly by their superior cultivation. This collection enabled us to settle several debated points of nomenclature, and while we express our thanks to the kind senders, we think we can say that by the public it was justly appreciated.

CHARLES ARNOLD, of PARIS, ONT., whose hybridized grapes, apples, and wheats, are well known, sent seven seedling apples, grown from the seven seeds of a Northern Spy, pollinized with Wagner and Spitzenburg, yet differing in form, color, size, and season. One of them, the Ontario, has been sent by the Fruit Growers' Association of Ontario to all its members. It is a winter apple of Northern Spy form. Another, the Dora, is a medium sized, early fall apple of fine quality. Another, No. 6, is a tough, elastic, high flavoured, scented, sweet Russet, quite a curiosity and an acquisition.

Mr. John W. Bailey, of Plattsburg, N. Y. who has been growing grapes for a lifetime, exhibited 32 varieties of grapes, 15 of which have not yet been fruited in this Province. Of these we must speak at length, but later. We would merely mention that he competed for the First Prize and took it. By this, you will see that the Prize List of this Society is open to all. We may add, that there never has been an admission fee; and to those 20 miles distant from Abbotsford no competition fee of any kind whatever. The first desire of a local society, is to see its own fruits. The Exhibitions are usually necessary to do this.

Their desire, then, is to see the Fruits of other localities, to unite, and as far as they can compel competition, to force those to fight, who are best able to beat them. A society does not begin to really grow, until it has been soundly thrashed, only by such a course of action can a society live a life of wide usefulness.

In the evening the shed, which was tastefully decorated with evergreens, mottoes, and flags of all kinds, was lit up with Chinese lanterns. The rush of a busy day was now over, and the directors could give an opportunity to their friends to taste the "new" grapes, while kinds not needed for reference were enjoyed largely by those present.

A novel and interesting meeting soon followed. The members of the Association and their wives met at the house of one of the officers of the Society, where 25 kinds of pears, nearly 70 of grapes, and a large collection of apples awaited their inspection. Such pears as were in eating order were first examined, their hardness, whether a success with Mr. Springle in Montreal, and whether grown at Abbotsford, etc., stated; the variety was then tasted and its flavor noted. In like manner followed the grapes. One other such meeting has been held since, well attended, and a like success. This was at the house of our President, Mr. N. C. Fisk on 15th Oct. when 9 kinds of pears (part of Eilwanger and Barry's collection), 27 or 30 of grapes, including very fine Salem, Lindley, Wilder, Massasoit and Adirondac grown by Mr. Fisk, and a number of apples were examined and tasted before us. Smaller committee meetings have also been held, at which the merits and demerits of different varieties were carefully weighed. We mention all this because these, the after-advantages of Exhibitions, are entirely overlooked, for it is only by thus studying fruits, that we can get any accurate knowledge of them.

CHARLES GRIBB, Sec.-Treas.



### Turnip Beetle.

My neighbour, Mr. Murphy, market gardener, having complained to me that, in spite of several sowings, he was utterly unable to raise a crop of turnips, I tried, on the poorest possible piece of land, our old Kentish plan, followed by all the farmers in the neighbourhood of London who grow "podding" peas for market. When the Frenchbeans, sown after spinach and radishes, were nearly meeting across the rows (24 inches apart), I sowed, about the 20th of June, white turnips between the rows. The Frenchbeans were gathered, green of course, in July, and the turnips were a full plant and are just pulled. Where I put in the same turnip seed in a vacant spot, every plant was devoured as fast as it came up. When the Frenchbean plants are taken away the turnips look weak enough, spindly, and pale in colour; but a few days of light soon bring them all right. Swedes will do just as well as turnips, but the flavour of a well grown

white turnip is so superior, that I always like to grow enough to last till Xmas, after which they become spongy and tasteless.

I fancy that the shadow of the French beans, peas, &c., keeps off the fly (beetle, rather); for if the turnips are sown before the ground is covered they will all be eaten. The fly never touches turnips or cabbages sown in a hotbed, or under glass, probably for the same reason.  
A. R. J. F.

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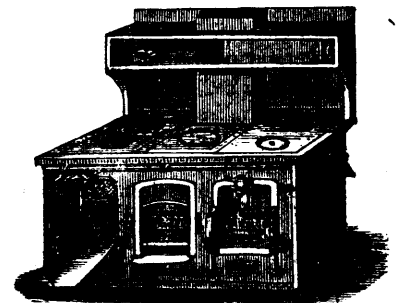
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