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AGRICULTURAL JOURNAL,

AND

TRANSACTIONS

OF THE

Lower Canada Agricultural Society.

Vol. 5.

MONTREAL, APRIL, 1852.

No. 4.

AGRICULTURAL MUSEUM.

The necessity and expediency of establishing an Agricultural Museum and Library has been formally acknowledged at the meeting of the Agricultural Congress on the 10th of February last, and we hope that some active measures will now be adopted to carry this plan into effect. It will be of little use to farmers, that the Congress should have asserted the principle by a resolution adopted unanimously, if there is no further action taken in the matter. A resolution in *words* is not calculated to effect much good to the interests of agriculture if we proceed no further. In such a country as this, where agriculture is the occupation of seven-eighths of the inhabitants, we might reasonably expect that every thing would be done that was possible to instruct, encourage, and protect, the first interests of the province, and that a few thousand pounds would be granted without hesitation for the instruction and encouragement of an interest of such vast importance to nearly two million inhabitants. There cannot exist a doubt that the establishment of an Agricultural Museum and Library would be very advantageous to agriculture, and be a great means of promoting its improvement. The collection of improved implements of husbandry, of grains, seeds, and plants, and a Library of books and periodicals on the science and art of agriculture, would have the very best influence upon the improvement of agriculture, and the cost of such an establishment would be repaid to the country a hundred fold. One thousand pounds would make a very respectable commencement for a Museum and Library. It would not be necessary to crowd the Museum with useless

implements, nor the Library with worthless books. Specimens of the most approved implements only should be received, and books should not be purchased by the square foot to fill a certain space on the shelves, but those, only that would be of undoubted usefulness. The Lower Canada Agricultural Society have already a few excellent books and periodicals, the best that are published on the subject, and to these, additions might be made gradually. Perhaps it would be well to have more than one copy of the most approved works, in order that they might be loaned out to farmers. It only requires an adequate appropriation, and the whole affair may be very soon on a respectable footing. This is a matter we presume deserving the attention of our Legislature, though it may be only a small affair in the estimation of many. This is a new country that requires the experience and example of the mother country in the practical art of agriculture, and we cannot have better assistance for our instruction than by bringing before us the most approved implements of husbandry, the best specimens of grain, seeds and plants; books and periodicals containing the records of agricultural practice, the results of experiments in cultivation, the comparative merits of different breeds of live stock, for the various purposes of producing meat, wool, cheese, and butter, the most approved dairy management, and the most judicious general management of the farm, manure, live stock, &c. The Act of Incorporation of the Lower Canada Agricultural Society authorises them to establish Agricultural Schools and Model Farms, an Agricultural Museum and Library, and the publication of an Agricultural Journal; but though this act is nearly five years in

existence, the only thing that has yet been done is the publication of the Agricultural Journal, providing a small Library, and the commencement of a Model Farm, but not on a permanent footing, and without a school being attached to it.

From the circumstances of the country, it will be vain to expect that the Lower Canada Agricultural Society can establish either Museum, Agricultural School, or Model Farm, without a Legislative appropriation for the purpose; and, therefore, all that we can write upon the subject will be useless unless the Government and Legislature take up the matter seriously, and provide the means. To the most superficial observer, it must be manifest, that there is now a fair commencement of agricultural improvement in Lower Canada, and if this happy commencement is properly encouraged there is no reason to doubt the most favorable results. The Canadian rural population, as a people, are not inferior to those of any country for becoming most prosperous agriculturists, but as there are numerous difficulties to be overcome in a new country such as this, they require aid instruction, and encouragement, until by the increase of population, the accumulation of Capital and more general education of farmers, they will be able to help themselves. So far from our mixed population being an evil, as some might imagine it to be; we conceive it to be a most certain advantage and well calculated to promote the general improvement and prosperity of our country, *provided always* that we cordially unite, *without distinction of origin*, in our endeavours to advance the interests of our common country.

We should always remember that an improved system of husbandry would be equally beneficial to all farmers who adopt it, whatever may have been the country of their origin. Thanks to our good and bountiful Creator our land will yield a produce in cattle, corn, roots, and fruit, proportionate to the care and cultivation bestowed upon it, whatever may have been the origin of the cultivator. A good and approved system of hus-

bandry directly rewards the party who adopts it, and not another, although this improvement undoubtedly adds to the general prosperity and wealth of the country he resides in. It may not be necessary that we should go into this mode of reasoning, but we are anxious to convince agriculturists, that any judicious improvements they may introduce in their farming is to reward themselves by a more valuable produce from their labor. There is no sound reason for rejecting improvements, from whatever quarter they may be recommended to our notice, because it is ourselves who are to appropriate all the advantages that may result from their adoption.

The following Report of Mr. Ossaye the Superintendent of the Model-Farm at La Tortue, was read by a gentleman before the "Agricultural Congress" on the 10th of February last.

THE NECESSITY OF AGRICULTURAL KNOWLEDGE.

It is only lately that men of genius have rescued agriculture from the false light in which it has been placed, to where we can fairly contemplate it. They have given it shape and character, having reduced it to an almost exact science with its axioms and demonstrable propositions; yet many of these propositions have not yet received their solution. It is to the efforts of Young, Thaër, Dombasle and Schweitz, chiefly, that we are indebted for the vast progress made in this important branch of science. Still, but few agriculturists deserving of the name, have been made, either by their works, or those of the learned men who followed them. And how was this? Must it be then inferred that their imperishable works contained only errors? Assuredly not. But the books of these celebrated men could only make a writer on agriculture, they could not make the agriculturist himself. A writer is he who knows a science and can speak of it, whereas, in the agriculturist there is this and something more, there is the manufacturer as well. If the study of the science can make a writer, education and the habits of a life in the fields are needful to make the practitioner. To render my idea clearer, I should say, gentlemen, that I distinguish two qualities in the one which exist not in the other, namely, the talent of the worker, and the tact of the overseer. To-day it is with agriculture, as with any other branch of enlightened industry; it has its science, its art, and its trade. And, to elevate trade to the height of art was the study of these men of whom I have spoken, in conceiving this science of agriculture. We can, at the present time, consider it under its proper

head as one of the most powerful means in sustaining progress, and preventing the evil effects of the best systems and doctrines erroneously conceived. But I do not insist upon the necessity of knowledge in this case; the various European schools of agriculture prove sufficiently by their success the necessity of their institution.

I proceed now to point out how, according to my view, agricultural instruction should be organized throughout the Province, in order to obtain promptly the desired results, and, in the meantime, your own part in the system.

In the course of the month of July last, gentlemen, I had the honor of presenting you with a memoir in which I treated, summarily, of the subject which I have to-day undertaken. Well, you expressed approval of my work by your approbation, but you have not taken into consideration the different measures which I proposed, because since then it was impossible to realize your projects. But, at present, these circumstances are changed, and you can without foreign aid lay the foundation of the splendid edifice which you have in view; I believe, therefore, the present time very opportune for recalling to your recollection the passages in that memoir, which bear upon our present situation. "With reference to schools of agriculture, I would say, let us, instead of establishing at the start a vast plan of instruction, with normal schools to prepare teachers, and schools of the 2nd degree to train overseers (*chefs-d'exploitation*), with others of the third degree, to prepare laborers; neglect the normal schools, and those of the 3rd degree, and commence with such elements as are at hand, a mixed school, &c." Lower down, I added, "more late, when agricultural instruction, thus organized, shall have inspired the confidence necessary to its progress, you can enlarge your plan. The school which you will have organized, will, in virtue of its experience and knowledge, occupy the place of a parent institution, a normal one, and one capable of furnishing directors to the first and second classes of schools." To-day I persist in my first idea; you cannot organize effectively and at once a vast plan of agricultural instruction throughout the entire extent of the Province, but you can trace the plan, and by sustained and well combined efforts arrive, more late, at its execution.

To establish a school at present without any ulterior views, would certainly be attended with good effect, though limited. But such is not your object; the title of *Institution*, which you have given to your establishment, and the report which your Committee has made last year to the government, upon the means of ameliorating Canadian agriculture, prove to me that you have for a long time comprehended the necessity of a system of instruction, which, to be efficient, ought to be established upon an extensive basis.

Agricultural instruction, such as I understand it, and should wish to see established in your Pro-

vince, is, as above, of 1st, 2nd, and 3rd degrees. The school of the *third degree*, is no other than the elementary one already in existence, and which should have for aim to perfect the *trade*. The school of the second degree would be one attached to a Model Farm, where the young men might learn the *art* of agriculture; where practice was demonstrated by science. One of these schools might be established in each county, under the direction of the Society of Agriculture therein. Then your *Institute* would be a school of the *first degree*, or a normal school charged with forming men capable of directing the two others.

This organization must appear, I apprehend, of immense advantage, but I proceed to demonstrate its indispensableness in future, and, moreover, that it remains possible to put it in execution at a time not far distant.

OF THE SCHOOLS OF THE THIRD DEGREE, OR ELEMENTARY SCHOOLS.

Gentlemen, if you desire to ameliorate promptly and in a sensible manner, the agriculture of your country, you ought to act upon the masses, and seize in its infancy the generation which is created, to prepare it for the new order of things. Consequently, it is in the elementary schools that you ought to commence agricultural instruction.

It is not necessary to say, that we go too far in undertaking to descend with children to the very details of education. It will be sufficient to hang up in the schools, tablets containing the great principles of the science, of which the dryness of the subject may be agreeably concealed under such appearances as are most congenial to morality and religion.

It appears to me that it also would be very wise, and very easy to learn a child to read, say the son of an agriculturist, by means of an alphabet, of which the letters would be so disposed as to express the axioms of agriculture more rapidly than any historic or other facts which have no relation to that profession.

Could one not also inspire the child with a horror of every vice in serving the cause of agriculture? Yes, assuredly, say to him, for example, that idleness is parent to the generality of evils which afflict mankind, especially to the farmer, and that every *habitant*, who leaves his cattle exposed to the inclemencies of the weather during a severe winter, in order to avoid the trouble of providing for them, commits not only an act of culpable laziness, but also one of barbarity, for which he will be punished by the death of one or more of his poor animals, and by many other evils besides.

It is certain that this child, on returning to his father, would repeat or read to him his lesson, and perhaps thus contribute to modify this odious custom.

If the lesson will not be sufficient to correct the old stupid, be assured that at least it will produce upon the mind of the child a most pro-

found impression. From the first, your scholars will comprehend mechanically the principles with which you desire to inoculate them, just as they understand all things, but more late, they will be sure to be taken advantage of as circumstances shall present themselves. The impressions of childhood remain for ever, and are the last abandoned; moreover, they have an immense influence upon the destiny of him who has received them; it is therefore we ought to guard the early education and instruction of children.

The elements of agricultural science thus engrafted upon morality, would produce still more satisfactory results, if they were professed by teachers who were friends to the science, and who, with a view of becoming such, had spent a year or two at the Institute to get conversant with the intended good resulting to society. A simple idea, unaided by such means as are accredited by the habitant, however good in itself, has not sufficient in its favor to justify the hope of its ready and general acceptance. Only think, if you were so happy as to instruct your children to-day, who in twenty years hence will be the farmers of Canada, this single axiom of the science, "the soil renders its fruits in proportion to its treatment," how much you would have done to merit the gratitude of your country. Youths of Canada, whose fathers disdain the precious manures which enrich the fields, know that "the earth only renders in proportion to the gift," and retain but this one truth and your future will be happy, for your lands will revive again, and abundance will be in your homes, and in your moments of happiness, you will experience, I am confident, a sentiment of gratitude, a remembrance for the men who revealed to you the secret of your prosperity.

It is also, gentlemen, at this very tender age that I would learn the child to cultivate a love of industry, and that I would emancipate him from those prejudices which are injurious to his after life, by removing from before his eyes every thing calculated to blemish his understanding.

Immediately will you be able by these means to secure, not instructed youths indeed, but youths disposed to receive the instruction of which you have already exposed to them the immense advantages. Then you shall have surmounted a grand obstacle, for remark, gentlemen, that in all your efforts tending to estore light and progress, you have powerfully to contend against a bad will, and a bad will in a farmer is nothing else than a spirit of defiance and prejudice, which passes always from the parent to the child, by means of the education of the family.

By a more dexterous education you may destroy this defiance and these prejudices in the spirit of the child. Once a man is disposed to instruct himself, his ignorance is half conquered, for his prejudices have already disappeared. Very good, profit of this first success, take the

young man in his happy disposition, and facilitate for him the means of receiving the instruction for which you have been disposing him. It is here, gentlemen, that the schools of the 2nd order find their place.

OF THE SCHOOLS OF THE SECOND DEGREE.

When a good farmer becomes once attained with this fever of progress which begins to obtain even in the most peaceful countries, and wishes his son to know more than himself, what does he do? Major Campbell has told you, gentlemen, at the period of the constitution of your Society, and I proceed to report his words which are so strikingly true:—"On more than one occasion, said the Major, have farmers come to me, and expressed a desire to give to their sons, who appeared to have some talents, a good education; and the question has always been, to know how this could be done, whether it was necessary that the child should be sent to an elementary school, where I feared, that at the actual moment he could learn but very little, or whether it was necessary to send him to a college where he would be instructed in Mathematics, Latin and Greek: and from which after he had achieved his course of studies, he returned to be fondled and spoiled by his too indulgent parents, too proud of the good education of their child. Well, will he now occupy himself with assisting his father in the cultivation of his farm? No, such an occupation has become inferior to the dignity of the young scholar. In fact he must now become either an advocate or doctor, and thus add one individual more to those professions already too encumbered; the house of his father, the residence of his childhood is despised, the coat of domestic manufacture is replaced by European broadcloth; he establishes his residence in the village, and he administers law or medicine to every habitant who wishes to confide to him the care of his affairs or of his person, and speaks politics falsely and passionately every time he can bring two or three neighbors together."

Gentlemen, this picture is far from being overcharged, but this good father who dreams of a better future for his son than his own, is he not blameable? Perhaps I ought to exculpate him. This good man, ever since his infancy, is placed face to face with his ignorance, the crushing load of which has always been an insurmountable obstacle to his intimate and innate ideas. He sees upon this earth two classes of men, one powerful, who commands the other, and to whom obedience does belong. Which class is sovereign? That which enjoys the benefits of instruction. He sees every blessing which can flatter a man on this side, privilege, titles, honors, riches, glory, and all the other elements which constitute the atmosphere of happiness, from which he is excluded. He has seen nobility of genius supplant nobility of blood, and maintain the range of loftiest equality. He is called upon each day

to admire the marvellous creations of the human mind, all daughters of instruction; and would you wish that, in presence of these striking truths, his unceasing heart will remain unmoved within him? No, it will not be so. If to him is lost the passing generation, if he cannot enjoy the blessings of an education to which he is a stranger, at least his son can be more happy, he will go to college, he will make his humanities, and then the door of this bright world shall be open to him, and then what happiness for that good father to say, "my son the advocate, my son the doctor." Noble ambition, too often but poorly recompensed!

Shall we rather blame the colleges in giving instruction which has no relation with their social position? No, gentlemen, we would not be more reasonable than in blaming the noble, but misguided ambition of the father of a family. The classical colleges of the Province are such as ought to be, they shed the light in their own place; for if agriculture has want of instruction, do not commerce; the sciences, the arts, and industry, at least where they exist, require also, imperiously, the means of maintaining their éclat? And our religion, has it no more need of apostles!

What then is to be done? Aid agriculture without injuring the other interests? Gentlemen, I see but one means: create schools especially for agriculture, schools of the second degree; these are the colleges which would have for aim to give to young men an instruction in relation with their future social position, to satisfy the very just ambition of fathers of families in giving to their sons such knowledge as should place them in a condition to appreciate the good procured by a life in the country, and the vast resources concealed beneath the soil, and which are unknown to ignorance; these are, in fine, the schools wherein the agriculturist discovers that his noble brow can wear the dignity of the loftiest social position without single envy envy to distribute him.

It would be superfluous, at the present time, to offer a programme of the course of studies in these colleges, which, as yet, are merely in contemplation; I can only give a vote, the realization of which exclusively belongs to the normal schools, and can only render possible the existence of these schools; it is, that agricultural instruction of the second degree does not surpass the wants which render it necessary, and at the same time be complete. Consequently, if in these secondary schools we give a superior theoretic instruction which requires the preliminary study of the exact sciences, it may happen that, among the educated who have made these studies, we will find a large number to whom the life of a farmer will be far from causing a smile, and who, seeing themselves, or fancying they do, capable of a very different pursuit, will quit the profession of their fathers to launch into an adventurous life. If, on the contrary, these schools have no other aim than

to point out to young men the best practical means of drawing from the soil the best possible return, you need not fear for these wanderings, because that they will feel themselves capable of any other than an agricultural pursuit.

The advancement of agriculture will suffer nothing from this system of instruction, for in like manner as medicine is the art of curing, rather than explaining diseases, so agriculture is the art of producing animal and vegetable productions, rather than a scientific explanation of them. Unfortunately, we too often confound the art with the science; but, it is not the science which we ought to teach with secondary schools, it is the art of agriculture.

What matter is it, in effect, to the farmer, whether he be ignorant, for instance, of the action of "plaster" (*plâtre*) upon vegetation; for him it is enough to know that this plaster is good for the development of leguminous plants; what matters it to the patient to know how the medicine operates upon the affected organs, provided he experience the healing effect; if he have confidence in the doctor he will follow his prescription, if the educated have confidence in the science of agriculture they will profit by the lesson.

The second motive which determines me to wish not to admit into the secondary colleges a system of instruction superior to the general wants of the farmers, is, because I am convinced that by too high a cultivation we attain to nothing. In fact, the number of young men who could follow the course of agricultural science to its highest perfection, would be comparatively small, and then the end would have failed. For I can well appreciate, at their proper value, the advantages which the country could draw from the model-agriculture of some learned men, I believe that these advantages would be nothing, compared to the agricultural improvements, however inferior they might be, executed by the great mass of laborers.

If, meantime, gentlemen, I regard the practical side of the plan, I observe that its realization, although difficult, is not the less possible.

Already, one side of the prospect, the primary schools, exist with a good organization. Nothing is wanting in these institutions to the carrying out of your views than the little elementary works, of which I have spoken above; and certainly the want of such books does not appear to me an unsurmountable difficulty, for if they exist not, they can easily be made. There is only wanting then the will for the ability to this important commencement.

Perhaps, gentlemen, the directors of these schools do not enjoy all the capacity required for so important a mission as that which would be confided to them, but if, as I have already observed, those who aimed, hereafter, at becoming teachers in the parishes, did come to pass a year or two at the Institute, we could be certain of possessing in ten years' time, a body of

tors fully equal to their mission. At the commencement we must be content with the best of those in charge. If I pass to schools of the second order, or county schools, I find more difficulty, because here everything is wanting, both men and money. When I say men, I do not pretend to say that there are wanting in each county agriculturists capable of giving instruction, but these men are not penetrated with the uniform spirit which ought to awake the whole body for the advancement of agriculture, a spirit which we cannot have except in the Institute.

But, gentlemen, these difficulties reduce themselves, in my mind, to a question of time. Whilst the Institute that you propose to found, will be actively laboring to instruct men for directing the regional farm-schools, the Societies of Agriculture for the counties can provide for the creation of their establishment. I will not allow myself to enter into their affairs, and to analyze their resources, I will only venture to say that, if each year were deposited as a reserve, the amount of the grant received from government, after 4 or 5 years a capital would be realized, which required but a trifling addition to suffice for the foundation of their college. And be assured, the counties would derive one hundred times more benefit from such institutions, than from their annual exhibitions, whatever may be their advantages.

If, however, these resources are not sufficient, you have good ground to hope that the government, in its solicitude for the prosperity of the country, will find a powerful motive for aiding these county societies.

OF THE INSTITUTE.

I now come to say, gentlemen, that the Institute should be destined for training directors to the other two orders of schools; we ought, accordingly, to give, from this day, to young men who come to follow the course, an instruction conformable to the end that we propose to attain, that is to say, as complete as possible.

Remark well, whilst that I have reasoned so far upon an hypothesis, and have said that you ought not to organize your Institute only in view of a general plan of instruction, I have, nevertheless, not engaged to labor *exclusively* from this day for the execution of this plan. On the contrary, we ought to commence as for an isolated establishment, and undertake to point out by our success that agricultural instruction is not an Utopian scheme, but merits well the confidence of fathers of families, and the attention of the government.

Neither to-day, nor hereafter, ought you to exclude from the Institute the young men who desire to receive a complete instruction, perfected, without at all times pretending to it, by the direction of a secondary school. You ought, on the contrary, to make every effort to draw to you all those who have a decided vocation for rural pursuits, and who, by their future position, fortune and education, or otherwise, could one day arrive at the first rank in society. In fact,

gentlemen, these young men, after having followed one course, could place themselves at the head of considerable establishments formed upon your plan, an advance guard of scientific progress in the country. It is to those that you would confide the care of continuing the great work which you have this day begun; they are those, in fine, who one day will fill your places to deliberate upon the vast agricultural interests of Canada.

You can no longer labor exclusively for the privileged class. It is necessary that at the commencement you point out to the laboring class, the practical farmers, that they especially are the object of your solicitude.

Accordingly, having regard to present and future interests, I can recapitulate thus the advantages which the public ought to derive from your Institution. The assembling together of all the young men of whatever condition, who may have a decided vocation for agriculture.

The giving to those, who, by their pecuniary or other advantages, can hope to become one day chiefs of the great party of enterprise, an agricultural education as complete as possible.

The giving to young men, less favored by fortune and instruction in the science, as much light in the trade as may raise it to the height of the art of farming, and the inspiring into all the noble sentiment of their profession, and a taste for all the virtues dignified by it.

Such, gentlemen, are the reflexions which I have ventured to submit to you upon the grand question which occupies your minds at this moment.

I have only to observe, additionally, that you are peculiarly and most happily circumstanced for giving to the world the example of a system of agricultural education, perfected, and universally applied to a country. You have for adversaries neither the prejudices of the old world, nor the jealous pretensions of the arts, of the sciences, and all other descriptions of industry, which in Europe have always treated agriculture as and bastard sister, a monopolized, to the detriment of this pursuit, all the higher intelligences of society, all the capital, and all the favors of the government. Your country is essentially agricultural, and you will be proud when you can point to your country as a people of educated agriculturists, to whom belongs the right to the first rank among the most polished nations.

As for me, gentlemen, if I can do something for the advancement of the agriculture and the prosperity of your country, you can reckon upon my entire devotion, for I have a heart to appreciate the benevolent reception which I have received among you, and should be most ungrateful, and even prepared to forget my country, when I ceased to cherish the remembrance.

Note subsequently added by Mr. Ossaye, to the foregoing Report which was read before the Congress:

With reference to the condition of a man who possesses ninety arpents of land, that

is to say, a small fortune, an honest ease, the ordinary ease of a Canadian farmer, two great reasons induce me to append this note in illustration. The first is based on an ardent desire, which I experience, of seeing as soon as possible all your soil refreshed, and your agricultural population become compact and powerful by a system of instruction opposed to that which has for immediate effect the undertaking for itself a labor beyond its intelligence: I will explain myself.

It is not needful to be a great observer in order to remark that instructed men are generally drawn towards the professions which they embrace, the major part by a natural inclination, some by circumstances, but very few by that force which rules all the others; and, moreover, these last nourish always at the bottom of their soul, the idea of emancipating themselves, as soon as circumstances will permit, from a state of restraint which is only maintained by necessity.

Wherefore should a man of this last class be any other than an agriculturist? Why should not the son of a farmer be secretly called to the agricultural profession of his father, just as the son of an advocate is not called to medicine but the bar, and the son of a doctor to medicine. I cannot see any reason to the contrary, and a long intercourse with men in the country has not taught me why it should not be so.

Consequently, if in these secondary schools were given a superior theoretic instruction which necessitated the preliminary study of the exact sciences, it would come to pass that, among the educated who had made these studies, very few would be found, to whom the life of a farmer did not appear far from being one to be smiled at, and who, seeing themselves, or believing themselves capable of doing a very different thing, would quit the profession of their fathers to embark in an adventurous life.

If, on the other hand, these schools had no other aim than that of pointing out to the rising generation the practical means of drawing from the soil the best harvest possible, you might not fear these mistakes.

I do not undertake, at present, to enumerate the many advantages infallibly resulting to your country from an improved agriculture. I merely allude to those interests which ought to be especially dear to you, I mean the future of your youth.

Long have your lands been deteriorating under a bad system of agriculture, and they no more yield to the hand of labor the same blessings as were formerly reaped by your ancestors. Their gifts are no longer adequate to your wants; you see each year pass away from among you, a vast number of young men, the legitimate hope of their country, to eat the bitter bread of exile in the land of the stranger. By this emigration your powers are daily exhausted; your fields become deserted, the strong arm is gone, and only the weak or the unwilling remain to you. If you have no other evils to deplore but this, if

your hearts can suffer you to see the children of the poor pass away, their energies and their intelligence made over to the stranger, ought you not at least to be afflicted to see those who do remain, the sons of the rich, wasting their patrimony in idleness, and the very education which they have received only contributing to their speedier ruin.

It is too true, that Lower Canada needs some outlet for her youth, some adequate prospect, some field of enterprise; you possess neither manufactories, nor mines explored; the arts and sciences offer but feeble advantages, the very government is usurped, and the political importance and fame of the country monopolized; your liberal professions are crowded and encumbered, and you have not even the sad resources of military life, which, in Europe, affords to millions of men the hope of a premature end: you have but the soil—but is this nothing?

As for myself, gentlemen, I am satisfied that your country can reap immense advantages from agriculture; your lands are not "worn out," but merely fatigued. In rich composition your soil yields to none, not even to the finest in Europe, and your climate is most favorable to agriculture; for your rigorous winters, though regarded as a misfortune by the farmer, only rest and invigorate the wearied earth, answering the end of much labor.

During summer, the heat of the day, and the beneficent dews of the night, animate the seeds of the earth, and hasten the beautiful birth of plants and flowers. It needs only that the farmer be conversant with those things which an agricultural education suggests, in order that your country may be prosperous, and her virtuous sons endued with energy, and blessed with enduring content.

A system of improved agriculture once established, it would in time be found extended throughout your province; and then you would no longer behold your industrious youths deserting their peaceful homes, seeing that their native fields could produce more abundant reward, than others to their hardy toil. Nor would your young gentlemen of fortune and education any longer disdain a profession which science has revealed to their eyes, but happy in those rural pursuits which foster virtue in society, and exempt from the thousand cares of life, they would quickly fly to it from those ungrateful "learned professions," which at present so unprofitably occupy their days.

DISTRIBUTION OF HER MAJESTY'S CHRISTMAS BOUNTY TO THE AGED &c.—On Monday her Majesty's Christmas bounty was distributed at the Royal Almonry-office, Middle Scotland-yard, by the almoners and sub-almoners to 430 men and women above 60 years of age, each of whom received 5s., the money being paid in two new half-crowns issued for the purpose from the Mint. The average age of the recipients was 82, 50 of the number being upwards of 90 years of age, and three centenarians.

INSTITUTIONS OF AGRICULTURAL CREDIT.
 BY A KIERBROWSKI ESQ., A DIRECTOR OF THE
 LOWER CANADA AGRICULTURAL SOCIETY, READ
 BEFORE THE AGRICULTURAL CONGRESS THE 10TH
 OF FEBRUARY LAST.

MR. PRESIDENT AND GENTLEMEN.—In my native country and in Germany I have witnessed the working of “Institutions of Agricultural Credit,” and I can testify to their marked utility. More recently, an equal opportunity for studying their mechanism was afforded me, and I do not hesitate to say that, since the introduction of political economy into the domain of science, none of all the practical appliances, having the progress and general well-being of the agricultural classes for aim, have produced more certain, more incontestible and multiplied results than these institutions. Before drawing your attention to the direct and, as it were, palpable advantages of these institutions, however, permit me to give you a brief history of their origin.

Looking into the history of the last century, we see Germany, and particularly Prussia, succumbing under the weight of a crushing debt, and on the verge of general bankruptcy; to-day, this vast and important portion of the European Continent has not only arisen from this condition, but has rapidly arrived at a state of unhopèd for prosperity, and this through the means of “Institutions of Agricultural Credit.”

These Institutions, like all others of human origin, take their beginning from “necessity,” which is, proverbially, the mother of invention.

After the seven years’ war which Frederic the Great had sustained against the rest of Europe, Prussia found herself so exhausted and involved in debt as to be altogether unable to afford any succour to the interests of agriculture; her very heart was crushed by the disasters of war. Nevertheless provisions were sold at the lowest price, lower indeed, comparatively, than they are to-day here in Canada.

The landed proprietors of Silesia, which of all the Prussian provinces suffered most from the calamities of the nation, obtained from Frederic II. a delay of three years for paying their debts.

This deplorable state of things suggested to the mind of Buring, a merchant of Berlin, a plan for relieving the landed credit of the country, by substituting for individual responsibility the collective guarantee of a society of proprietors engaging themselves by hypothecary contract or the mortgage of their properties.

The Silesian association, formed about 1770, was very imperfect at first, but afterwards progressively improved, and finally was perfected by the introduction of a most important reform, that of the extinction of debts of *mortmain*.

The “Institution of Agricultural Credit,” of Poland, had an analogous origin with that of Silesia; the enormous charges accumulating upon landed property, by the wars of Bonaparte in the grand duché of Varsovie, first constituted a “quit-rent,” upon the profits of the debtors. They subsequently caused a general liquidation by means of a collective credit, an organization in which Poland profited of the bitter experience purchased by Prussia.

In the other states of Germany, the origin of “Institutions of Agricultural Credit,” is different; it were superfluous, gentlemen, to enumerate them here. I cannot pass over, nevertheless, in silence, an Institution of Agricultural Credit in Hanover, which was founded for the redemption of property from tithes, from servitudes and other feudal rights.

This institution, after having redeemed the land of that country from all rent charges of a feudal nature, has procured for itself the necessary capital for agricultural works and the other wants of property. Other German states have ultimately followed an analogous course with a similar view; throughout all, since 1815, divers laws have authorised the redemption of the greater part of these charges. Agricultural Credit had the effect of rendering redemption possible, by advancing to landed proprietors in rotation the funds needed, during the time possible for such redemption. These operations, which are not yet terminated, especially in Austria, have, in general, redeemed the landed property of the respective countries.

The farmer is enriched, and in his riches is the land enriched.

But a common thought presides at the creation of all these institutions. The thought is this, there exists for the lender a multitude of chances of loss: these irregularities and the slowness of the process, the valuation, sometimes excessive, of immoveables, their depreciation again from unforeseen events, the nature even of the landed revenue which only answers but slowly to the sacrifices made for ameliorating the soil; all these circumstances are matters of uncertainty for creditors, and contribute to render lenders more cautious; they force the borrower either to pay a high interest, or to engage, for an equal sum, the greater quantity of his immoveable property. If we add to these circumstances the competition which subsists between agriculture, commerce, and industry, we can readily understand how the hypothecary loan, surrounded by troublesome and illusory formalities, drives far away the capitalists, their fears and their papers. It is, moreover, certain that capitalists who seek an investment upon such hypothecation, are very unequally distributed, being abundant in some places, and but rare in others; now this inequality is not without prejudice to landed property; industry and commerce feel it less. With regard to the inhabitants of the country parts, the force of circumstances creates oftentimes intermediary officials who are too often notaries, these intermediaries acting without any tie between them, each within the narrow circle of a restrained clientage. It naturally results from this isolated state of ignorance, reciprocal of means and wants respectively, that capital may offer in one place to no purpose, while in others it is vainly demanded. The remedy for this false and grievous state of things is, evidently, the creation of a publicly accredited *intermedium*, with the view of establishing a relationship between those having money to lend, and those who are desirous of borrowing.

Such are the principal reasons which had given rise to Institutions of Agricultural Credit. These Institutions are regulated in

some countries by the state; in others, by an association of proprietors; and in others again, by an association of the lenders. Here are the advantages which these associations of Agricultural Credit offer respectively to the lender and borrower.

First of the borrower.

1 They allow him to find a capitalist without the expensive intervention of a third party.

2 They obviate premature and unforeseen demands for re-imbusement.

3 They afford the means of redemption by small payments with long terms.

4. By limiting their employment to the subservence of these interests, they would inspire a spirit of order favorable to agricultural enterprise.

5 They would raise the value of good land, and double the productive virtues of the soil.

And here are the advantages which they offer to the lender.

1. They offer a safe investment and a uniform rate of interest.

2. They dispense with the care of hypothecated estate.

3. They obviate the embarrassments of a complicated procedure, a deed of engagement being then sufficient.

4. They save the expenses accompanying the payment of interest, the entry, and the disposition of capital.

In the meantime let us see the general effect of these Institutions.

1. They lower the taxes in general with the value of money.

2. They are more efficacious for the suppression of usury than the most stringent laws on the subject.

3. They place agriculture upon the same footing as other branches of industry, and its commerce.

4. They would direct capital to land, and retain population in the country.

5. They would oppose the partition of property by a salutary counter check.

6. They would render the production of land produce more easy and less expensive; and without injury to agriculture they would

lower, in a manner profitable for all, the price of the ordinary articles of food.

As a definitive *resumé*; gentlemen, we have the experience of nearly a century to warrant the vast and admirable mission which these Institutions have undertaken and already accomplished, and which they continue to accomplish, in those countries so happy as to possess them.

The best proof of their usefulness and stability is that they seldom, or scarcely ever, follow the vicissitudes of state; often as the governments have intervened with the view of favoring them, their faith has never been compromised. In reality it is purely *moral*, and I doubt not that if Lower Canada had the happiness of naturalizing them, of making them racy of her soil, they would rescue her, as they have rescued central Europe, from every ancient servitude and feudal claim. They would contribute to check the tendency of Canadian emigration to the west; they would favor the colonization of the Townships, and, as a last analysis, they would contribute to render back to the soil, exhausted by a long improvident course of culture, its proverbial and ancient fertility.

DEAR SIR.—I have just completed the perusal of the proceedings of your "Agricultural Congress," as reported in the Montreal Journals which you, with your usual kindness, have sent me.

I observe that this scheme of a Congress was originally embodied in a motion made at a previous meeting of your Society by Major Campbell, who, by the way, has been beating his British sword into a plough-share to some purpose; and that the idea of an *Agricultural Museum* has been started by you at the same meeting.

Now, passing over Mr. Tâché's brilliant memoir, I come to the invaluable Report of the able director of the Model Farm, of your Society, which appears to have been projected upon a motion of your own. I cannot attempt in this brief epistle to analyze that masterly document, but it appears to me to embody the great principles of agriculture, and to apply them to your country with rare aptness and success. Doubtless there is genius and public spirit in Lower Canada to seize the golden thoughts of this man.

Every day are we forced to witness the triumphs of literature; here is a lesson of prosperity from one brain to an entire people; but in bringing your agricultural affairs to this pitch, your Journal, or rather its able editor, Mr. Evans, has performed an important part, for I have closely watched the labors of that man in this unpretending field of industry for some years past.

I am happy to perceive among the minutes of your Society the name of Mr. Walker, the worthy mayor of Roxbury, and ex-president of the Massachusetts Agricultural Society, as Honorary Member; you could not confer this honor more worthily, for Mr. Walker is a gentleman of much zeal and ability in every peaceful work tending to the welfare of his fellowmen. I thank you for the Report of the Commissioner of Education which I have just received; and upon looking over it, I may favor you with an observation or two, should I find it to correspond with my expectations.

This gentleman can serve his country, I believe, by aiding the views of the Agricultural Report of Mr. Ossaye. And now with respect to the Agricultural Museum, this I regard as the perfection of Mr. Ossaye's views. When the ambition and energy of your province have been fairly enlisted in the cause of agriculture, some central place ought to be selected as a *focus* where the concentrated endeavours of all would be seen, felt and appreciated.

With regard to Yankeeedom and our *notions* here, I must tell you something of the, "Sixteenth Meeting of the Farmers' Club," which met together here on the 2nd ult., in Germantown. One gentleman exhibited his system of keeping Farm accounts, and a map of his Farm based upon the system of Farm Accounts used in the Royal Agricultural School of Prussia. It is very simple, and were your agricultural affairs in a fair way, I should think you might derive advantage from this system. By it a farmer can know the comparative profit accruing from the several branches of husbandry, and what each branch costs, &c. Having already extended this letter to an unpardonable length, I shall reserve domestic affairs for my next, and remain very truly yours
J. H.

L. A. H. Latour, Esquire, Montreal.

DEAR SIR.—I do not know if my worthy friend, Dugald Stewart, has any communication with you or ever forwarded to your Journal a Copy of

the Annual Report of the Agricultural Society of Restigouche. In case he should not have done so, I enclose herewith the one for this year, remarking at the same time that their Agricultural Society is almost co-eval with the existence of their town or city, of Dalhousie.

I remember, within sixteen years, when there were but *two houses*, where there is now a flourishing town with its Churches, Printing Presses, and an Agricultural Society now issuing its twelfth *Annual Report*, though their climate and soil are both inferior to those of most parts of Lower Canada; their agriculture and breeds of cattle would bear a favorable comparison with any thing we have. They have, among several importations, brought out the pure West Highland Bull which crossed with good Norman (*Canadian*) cows, has been found to give them a breed valuable for their climate and soil. Mr. Stewart writes me that their Agricultural correspondent in Ayrshire informs them recently, that they have now ascertained that the original breed of Ayrshire cows was a cross between the Alderney and West Highland, if so we might take a useful hint in Canada where we have a breed analogous to the Alderney.

The West Highland bull, imported by my friends, was from Isla, and they intend importing another from Skye.

They find the cross between the Leicester and Southdown their best sheep. They imported last year 6 Southdown ewes.

My own experience leads me to prefer a cross between the Cheviot and Leicester. I imported fine bred Leicesters at a great cost, and lost all but one the first winter. The same year I bought a Cheviot ewe from the master of a vessel that came from Thurso and out of her by my Leicester Ram. I have a Ram lamb, which, for size and beauty, excel any thing I ever saw. I should remark that the ewe is more hardy than the native sheep. I intend this next year to import six ewes of this breed from the Highlands. I send you a Quebec paper with an article on the proposal of Messrs. Young & Co. to furnish cheap agricultural implements.

Your obedient servant,

Geo. M. DOUGLASS.

Wm. Evans, Esquire,

Secretary and Treasurer L. C. A. S.

To the Editor of the Agricultural Journal.

MR. EDITOR—I beg leave to acknowledge through the columns of your *valuable* and interesting Journal, the benefits which farmers in general in this section of the Province have derived from your long and unwearied efforts in the extension of agricultural improvement. I must say it is the duty of all classes to lend their support to a work of this kind, as Canada being essentially an agricultural Country, the interests of all are affected by the success of the farmer, and, consequently, it is their duty to aid in the circulation of your Paper thereby rendering a benefit to the country. I am well aware, from personal experience, that many farmers, trusting to their own practical knowledge, object to all improvements or hints suggested to them through the medium of the press, but if they would take into consideration what has brought agriculture into such a flourishing condition in the United States and the Mother Country, as it is at present, they would at once see it was caused by means of the institution of Agricultural Societies, and the publication of Agricultural Periodicals.

I must acknowledge, in conclusion, the vast amount of good the "Lower Canada Agricultural Society" has effected for the promotion and improvement of agriculture in Lower Canada, since its first organization, and I hope it will still continue its exertions, and farmers will profit by its endeavours.

I remain, Sir,

Your obedient servt.,
T. A. C.

Montreal, 13th March, 1852.

MILKING MACHINES.

MR. EDITOR,—It is some time since I made a remittance for the ploughman. I enclose one dollar with the intention of sending another before April. I think, I have read in the *Ploughman*, something of the excellencies of an apparatus or machine for milking cows. A friend of mine desires me to consult you on the subject. Will you be so kind as to give your opinion concerning the invention,—the price of one, and the economy of such an outlay when invalids are under the necessity of drawing milk from cows.

Will you mention where the milker may be obtained and the expense of sending to Wilimantic, Ct.

I also make another suggestion. I am greatly in favor of strict attention to the gathering and keeping of family records. It is a shameful fact

that the mass of the people know little or nothing, of their genealogy. Would it, dear sir, meet your approbation, should I send you an article of extracts taken from my Family Records?

I close, sir, by wishing you and the Patrons of the Ploughman,—*A Happy New Year.*

May the God of mercy speed you on,
Not faulting by the way;
Spread light and truth, till death shall come,—
And angels guide to endless day.

BENJ. LYMAN.

Columbia, Ct., Jan. 3.

☞ We have had a cow milker presented to us and we still keep it for exhibition only. We cannot recommend it for use, for we think it would prove injurious to the udder.

Many cows shed milk while in the pasture. The insertion of a pipe to draw out the milk must inevitably tend to increase this evil. In addition to this, we think the metallic pipes would not draw out the milk fast enough. It is found that the quicker the milk is drawn from the cow the better, as more is obtained than by slow milking.

We have seen milk drawn out of the cow's bag by straw pipes. These have been recommended by some to farmers. Metallic pipes would not prove so injurious as straw pipes. Still we have such strong objections to any pipes for drawing out milk that we have not permitted any to be used on our own cows.

Family records are interesting to the parties concerned, and to towns where families are extensive and well known. But the public are not generally interested and would not read long records. We will publish concise accounts with much pleasure.—*Massachusetts' Ploughman.*

MR. W. W. FYFE'S NORMAL LECTURE ON AGRICULTURAL EDUCATION.—A lecture on the subject, "What can Education do for Agriculture?" was delivered in the Normal School, Moray-house, Edinburgh, on the 13th ult., by Mr. W. W. Fyfe, to a very intelligent and attentive audience of teachers, students, and others interested in the introduction of agricultural instruction into our common schools. Mr. Fyfe began by explaining why agriculture had been less advanced by education, and even by the progress of science, than other arts, in close connection with the pursuit of some of which great discoveries had arisen. No science, however, was more capable of benefiting by the progress of physical discovery, and none had a more important bearing on the interests of society, as Mr. Fyfe showed by a rapid review of the question of "subsistencies," in its relation to destitution, disease, and crime; making an appeal to the students, whether of religion or education, to join in the work of propagating the principles of agriculture even on philanthropic views—although that was low ground, and the matter on

which ought to require no argument and no incitement. Having discussed the merits of all the elementary Text-books, Johnson's Catechism, the Manse Garden, Irish Agricultural Class-book, Dr. Lindley, Kemp's Vegetable Physiology, and Mr. Macadam's Chemistry applied to agriculture, the lecturer endeavoured to show that a general text-book of agriculture for elementary classes was still wanting, and he urged that it should not be taught as agricultural chemistry merely, but in the undernoted range of sciences, nor should each science be enforced as a study and proved experimentally, but its facts accepted, and applied to the business of practical cultivation. He divided the study into the following natural sequence of the sciences:—1. Geology (representing in the applied science of agriculture)—the soil. 2. Chemistry—the relations of the soil and the plant. 3. Vegetable Physiology—the functions of plants. 4. Botany—their species and varieties. 5. Animal Physiology and Zoology—the functions and species of animals. 6. Meteorology—the weather and climate. 7. Hydrostatics and Pneumatics—drainage and ventilation. 8. Mechanics and Engineering—implements and practical operations. Having at great length expatiated the facts of geology, Mr. Fyfe gave a *resume* of the other sciences in the agricultural curriculum, and their bearing on the subject, as well as of the importance of the information they afforded, being generally taught in schools. Science teaches us the simplest means of attaining the greatest effect with the smallest expenditure; and with given means to produce a maximum of effect. The unprofitable exertion of power, physical or pecuniary, the waste of force in agriculture or in other branches of science, is characteristic of the want of knowledge.

Journal of the Royal Agricultural Society of England. Vol. IX. Part I. London: J. Murray, Albermarle-street.

We would again allude to an excellent essay "*On the Rearing and Management of Poultry*," by Mr. W. Trotter, convinced that we cannot too often direct attention to this useful department of the pursuits of the farm. The essay is illustrated with beautifully executed wood-cuts of the Queen's poultry, and poultry-house, Windsor, and the various species of fowls.

The Dorking Fowl.—The Dorking breed of fowls derives its name from a town in Surrey of the same appellation. From the excellence of its flesh, from its plumpness and great weight, it has derived a celebrity for the table unrivalled by any other breed. It may be justly said, that "its qualities surpass its charms." The hens are not to be equalled as sitters; hence the breed is peculiarly adapted for districts where table-birds are in request at remunerative prices. The hens are very good layers. Some say that those which are white are the only pure breed; this is a matter of opinion. The most prevailing colours are spotted or spangled, in various shades.

The fowls of this breed have five toes on each foot; a peculiarity, if absent, denoting impurity of blood. From protuberances in the feet, these fowls are very much predisposed to lameness.

This breed degenerates when removed from its native place. Situation will undoubtedly have great influence, but I attribute this degeneracy more to want of "fresh blood" and mismanagement than to the influence of climate. All animals bred in and in sooner or later degenerate. When this breed is considerably removed from its native sphere, the practicability of getting "fresh blood" is greatly reduced.

The Dutch every-day layers.—Of all fowls which come under my notice, none equal the Dutch every-day layers in the production of eggs. I acknowledge the eggs to be a little less than the average size, but not to such an extent as to materially interfere with their marketable value.

A gentleman of great experience has kindly favored me with the number of eggs he obtained from four hens of this breed. The average for three months was no less than twenty-six each week, each egg weighing two ounces.

The hens commence laying at the early age of four or five months; whereas the larger breeds seldom commence to lay before they are twice this age. This is no trifling recommendation.

Of this breed there are two varieties distinguished only by color; the one is termed the "golden spangled;" the other, the "silver spangled." To describe them minutely would be going beyond the precincts of this paper. I may be permitted to remark that this breed is often confounded with the "spangled Ham-burgh," and also with the "black Polish;" the differences between which I shall notice when I describe the latter varieties.

The Dutch every-day layers derive their name from the fact of the hens continuing to lay, rarely evincing any disposition to incubate.

In size this breed is equal to the average size of the game fowl. They are exceedingly well shaped; in their movements they are very majestic and graceful.

The "silver spangled" of this variety is in some localities known by the name of "Bolton greys."

The breeder must, in the first place, ascertain whether he can obtain most profit from the sale of eggs or from the sale of chickens. How is he to come at this? I say, without going into details, if he can obtain two shillings each for chickens, that he may select fowls which are best adapted for the table; if he cannot obtain this price, then he must select such as are known good layers—such as seldom show any propensity to propagate their own species by incubation.

Table Fowls.—If it be found desirable to breed for the table, then the Dorking is what I recommend; and, moreover, the greater the number of chickens that can be reared from the same number of eggs, the greater is the profit; suc-

cess, therefore, to a great extent, depends on the qualities of the hens as sitters and as nurses. Here again the Dorkings stand pre-eminent, for better sitters and nurses cannot be produced. Some fanciers of repute recommend a cross with this breed and the Malay or the Cochin China. I cannot subscribe to this recommendation, unless the objects to be obtained are an increase in offal, and a decrease in the qualities of the hens as sitters, especially if with the former. If a cross must take place, as some writers say, to renew a degenerating race (be it observed I do not admit of this, from the very simple and obvious fact of the Dorkings of this day being as heavy as any Dorkings that have come under our notice of past dates), let the cross be with a well-shaped bird, of small bone, and undeniable flesh. The Spanish, possessing these qualities in an eminent degree, is the only bird I would recommend to cross with the Dorking. Attend to what the late very talented naturalist, H. D. Richardson, says in his work on domestic fowls, when speaking of the Spanish:—"As table-birds they hold a place of the very first rank, their flesh being particularly white, tender, and juicy; and the skin possessing that beautiful clear white hue, so essential a requisite for birds designed for the consumption of the gourmand." W. C. L. Martin, "late one of the scientific officers of the Zoological Society of London," is, in his treatise on poultry in *Knight's Farmers' Library and Cyclopædia of Rural Affairs*, no less liberal in his remarks in praise of the Spanish fowls. I, therefore, have the best authority to substantiate my own opinion of the high value of the Spanish as birds for the table. I have, consequently, recommended them in preference to all others to cross with the Dorkings.

Many people, when buying fowls for the table, make the color of the legs the criterion whereby they judge of the quality of the flesh; I may therefore be allowed to state that Soyer, in his valuable work on cookery, says that those "fowls which have black legs are the best for roasting, while those with white legs are the best for boiling."

Fowls for Laying.—For the purpose of laying, no breed of fowls is better adapted than Dutch every-day layers. Should their eggs prove rather small, a cross with the Spanish will at once remedy the defect. For our part we are satisfied that (although the eggs are less than those laid by the larger varieties of fowls) yet they are equal to those laid by the dunghill breed. That the eggs of the Dutch are less nutritious, from their great number, is merely speculative and without foundation.

The black Polish is also notorious for the production of immense numbers of eggs. Should its appearance be more in accordance with the taste of the owner, I offer no objections to it.

HOW TO OBTAIN A GOOD BREED OF POULTRY.

Number of Hens to one Cock.—The next point we have to dispose of is, ought there to be any

discretion used in proportioning the number of hens to the number of cocks?

Dickson has acquitted himself better on this subject than any author previous to his day whom I have consulted. His remarks are ably followed up by the late H. D. Richardson, who goes on to observe, "that the number of hens allowed to one cock should vary with the object in view."

"If the profit be from the production of eggs alone, one cock may have as many as twenty-four hens. If the object be strong and healthy chickens, he ought to be restricted to six, or at most eight." So far I agree with the author quoted.

If chickens are not wanted for sale, they are wanted to renew the stock of hens. And as no one can deny the necessity of having healthy chickens for consumption, surely no one will deny the advantage of having healthy pullets to add yearly to the stock; which, be it remembered, should not be kept above three years (unless of a valuable breed), after which they are almost useless, even for household purposes.

The stock of fowls in our poultry-yard is kept for the production of eggs, and to keep it up, a number of pullets is reared every year. To have the pullets strong and healthy is of the utmost importance. This object could not be obtained without either keeping a great number of cocks, or keeping a small number of hens and a cock in an enclosure. The latter method I have adopted, and strongly recommend it to the notice of breeders of fowls. By it I am enabled to keep a less proportion of cocks than I could else safely have done. Were it not for the received opinion that hens do not lay so well when deprived of the company of the other sex, it would have been useless to keep a cock. As it is, the number of hens to one cock may be as high as thirty. Recollect we are speaking of the laying stock of hens, and not of the breeding stock. The very eminent French writer, M. Parmentier, if we mistake not, witnessed the productive powers of a cock fifty times in one day. We restrict three hens to one cock, when the eggs are wanted for hatching.

Selection of Eggs for Hatching.—Writers on poultry give directions for the selection of eggs for hatching without noticing whether the eggs are laid by the handsomest or by the ugliest hens in the yard; a system which cannot be too strongly condemned. All breeders are aware that "like produces like" in all pure breeds of animals. No doubt there are exceptions to all rules, but, if this maxim be kept in view, the right line will seldom be deviated from. By the method we have adopted of selecting the finest hens to breed from, and by keeping them in a yard with a cock not related to them, and by selecting eggs from those laid by them, considerable advantage is gained over the method of selecting the eggs for sitting from those laid by the whole stock of hens. I give preference to such eggs as are a little above the average size,

having always found them to produce the strongest birds. All irregular-shaped eggs must be rejected.

A discovery was made by Columella, and laid hold of by others, of great importance to the practical breeder; as it enables him to select such eggs as will produce male, and such as will produce female birds. I say of great importance, because he who depends on the sale of eggs for profit does not want male birds, and therefore it would be useless for him to breed them. To him Columella would say, "Select the round eggs for they contain the female birds, and reject the oblong shaped, for they contain birds of the opposite sex. By the position of the air cell at the butt end of the egg, those may be selected which will produce the male sex: in these the air cell is in the centre of the end; if the cell be a little at one side the egg will produce a female chick. The position of the air cell is easily discovered by holding the egg between the eye and a light."

A DIGGING MACHINE.

George Guthrie, of Appleby, Chamberlain to the Earl of Stair, for improvements in machinery for digging, tilling, or working land. The machinery which forms the subject of this patent is intended to facilitate the operations of digging and working land, by the application thereto of steam power. The machine is composed of a strong rectangular wooden framework mounted on four wheels, which are made wide in the tyre to prevent their sinking into the ground, and to facilitate the travelling of the machine. The motive power for working the grappemovement or digging action, is derived from a pair of steam cylinders, supported by the framing, which serve also to supply the power for propelling the machine. The diggers are formed with three prongs each, and they may be of such a number, arranged side by side, as to extend across the whole width of the machine. In addition to the downward motion imparted to the grapes by a crank, for the purpose of causing them to enter the ground, they are also acted upon, after they have past through the first half of the down stroke, by a second crank, by which they are raised to a horizontal position, carrying with them the portion of the earth immediately in front and within the scope of their action. As soon as the grapes have arrived in this horizontal position, the shaft on which they are mounted is caused, by means of a slide working on a spiral or screw of coarse pitch cut on that shaft, to make a semi-revolution on its axis, so as to throw off the earth which had been supported on the grapes, which are then returned to their original position, and carried back ready for operating on a fresh piece of ground, over which the machine will by this time have been moved. The patentee does not confine himself to the employment of cranks for effecting the movements of the grapes, as other means, capable of producing a similar motion approximating close-

ly to that of the spade in hand-digging, may be adopted for the purpose; instead, also, of the above-mentioned arrangement of the grapes, they may be fixed to a revolving shaft, and the earth may be removed from them, by causing them in their revolution to come in contact with suitable stops. It may be necessary in some cases, in order to facilitate the action of the grapes, to make a series of cuts in the land previous to the grapes coming into operation; and this may be effected by attaching to the front of the machine a series of circular cutters fixed on a revolving shaft, and brought into action as the machine is propelled forward. *Claims.*—1. The general arrangement of the grapes, forks, or spades, for digging and working land. 2. The system or mode of turning the grapes or digging apparatus by a screw and traversing slide. 3. The application and use of guides for giving direction to the grapes. 4. The system or mode of digging or working land by causing the grape or digging apparatus to turn, or partially revolve, when loaded with earth.—*Mechanics' Magazine.*

HOW TO PROSPER IN BUSINESS.

In the first place, make up your mind to accomplish whatever you undertake; decide upon some particular employment; persevere in it. All difficulties are overcome by diligence and assiduity. Be not afraid to work with your own hands, and diligently too. "A cat in gloves catches no mice." "He who remains in the mill grinds," not he who "goes and comes." Attend to your business, and never trust it to another. "A pot that belongs to many is ill stirred and worse boiled." Be frugal. "That which will not make a pot will make a pot-lid." "Take care of the pence, and the pounds will take care of themselves." Be abstemious. "Who dainties love shall beggars prove." Rise early. "The sleeping fox catches no poultry." "Plough deep while sluggards sleep, and you will have corn to sell and keep." Treat every one with respect and civility. "Everything is gained, and nothing lost by courtesy." Good manners insure success. Never anticipate wealth from any other course than labor; especially never place dependence upon becoming the possessor of an inheritance. "He who waits for dead men's shoes may go for a long time barefoot." "He who runs after a shadow has a wearisome race." Above all things, never despair. "God is where He was." "Heaven helps those who help themselves." Follow implicitly these precepts, and nothing can hinder you from prospering.

POWER OF GENTLENESS.—Whoever understands his own interest, and is pleased with the beautiful rather than the deformed, will be careful to cherish the virtue of gentleness. It requires but a slight knowledge of human nature to convince us that much of our happiness in life must depend upon the cultivation of this virtue. Gentleness will assist its possessor in all his lawful undertakings: it will often make him successful

when nothing else could; it is exceedingly lovely and attractive in its appearance; it wins the hearts of all; it is even stronger than argument, and often prevails when that would be powerless and effectual; it shows that man can put a bridle upon his passions; that he is above the ignoble vulgar, whose characteristic is to storm and rage like the troubled ocean, at every little adversity and disappointment that crosses their path; it shows that he can soar away in the bright atmosphere of good feeling, and live in a continual sunshine, when all around him are like maniacs, the sport of their own passions.

BEAUTIFUL EXTRACT.—Do tress talk? Have they no leafy lunge—do they not at sunrise, when the winds blow, and the birds are carolling their songs, play a sweet music? Who has ever heard the soft whisper of the green leaves in spring time, on a sunny morning who did not feel as though rainbow gleams of gladness were running through his heart? And then when the peach blossoms hung like rubies from the stem of the parent—when the morning glory like a nun before the shrine of God, unfolds her beautiful face, and the moss roses open their crimson lips, sparkling with the nectar that falls from heaven, who does not bless his Maker?

CANINE FRIENDSHIP.

A gentleman resident in Lincolnshire was travelling about eighty or ninety miles from home, and left a favorite little dog at an hotel while he visited another town in the neighborhood. On his return, the landlady, in dismay, told him his dog had been attacked by a large dog of her own, and had run away from the house. He left, but returned again to the same hotel after the lapse of a few weeks, when the landlady informed him that his little dog had returned in the interim accompanied by a large dog, who had attacked her own dog so fiercely that he had nearly killed him. From the description given of the animal, the gentleman entertained no doubt but that it was his own house-dog from Lincolnshire; and on his return home he learnt from the servants that shortly after his departure, his little favorite dog returned one day, bearing marks of much ill-usage, and after apparently consulting with the larger animal, the two dogs set off together, and were absent several days—presenting evidences, on their return, of having travelled a considerable distance.—*Lincoln Times.*

MODESTY.—Nothing is more amiable than true modesty, and nothing more contemptible than that which is false; the one guards virtue, the other betrays it. True modesty is ashamed to do anything that is repugnant to right reason; false modesty is ashamed to do anything that is opposite to the humor of those with whom the party converses. True modesty avoids everything that is criminal; false modesty, everything that is unfashionable. The after is only a general, undetermined instinct—the former is that instinct limited and circumscribed by the rules of prudence and religion.

32. Teats, large and squarely placed, being wide apart	...	...	...	...	...	...	...	...	1
33. Milk-veins, very prominent	...	...	...	...	...	...	...	...	1
34. Growth	...	...	...	...	...	...	...	...	1
35. General appearance	...	...	...	...	...	...	...	...	1
36. Condition	...	...	...	...	...	...	...	...	1
Perfection	...	...	...	...	...	...	...	...	-37

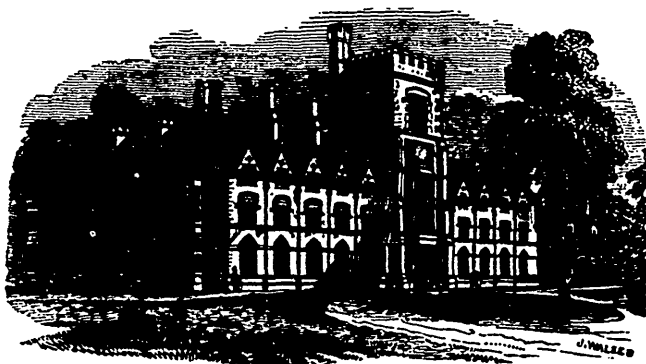
No prize shall be awarded to a Cow having less than 29 points.

No prize shall be awarded to a Heifer having less than 26 points.

A Cow having obtained 27 points, and a Heifer 24 points, without pedigree, shall be allowed to be Branded, but cannot in either case take a prize.

Three points, viz. Nos. 30, 31, and 33, shall be deducted from the number required for perfection in Heifers; as the Udder and Milk-veins cannot be fully developed; a Heifer, therefore, will be considered to be perfect at 33 points.

The term "Pedigree," is employed to signify the offspring of a prize, or deteriorated Male or Female Stock.



ROYAL AGRICULTURAL COLLEGE OF CIRENCESTER, ENGLAND.

DISTRICT AGRICULTURAL SCHOOLS AND MODEL FARMS.

If we had not in our last number promised to submit our humble views in regard to District Agricultural Schools and Model Farms, we should scarcely venture to do so now, when the subject may be taken up by parties much better qualified to do it justice. As, however, we have so constantly advocated the justice and expediency of providing these institutions in order to give to agriculturists an equal chance of succeeding in their profession, that other classes always have had; we conceive it to be an imperative duty to submit some practical plan for consideration, previous to the assembling of the Legislature, because, should the Provincial Parliament be pleased to entertain the subject, and make provision for having the experiment tested by establishing two or more District Schools and Model Farms, it will be necessary to place them on such a footing as will afford every reasonable confidence in their successful working. Many

excellent measures in themselves, have failed to accomplish their object, in consequence of some defect in the plan, that, *practically*, was found to prevent their successful action. Our plan has no reference to preparatory schools, but to district experimental schools alone, where young men, above fourteen years of age, would be educated as scientific and practical agriculturists, and at the same time have instruction in the other necessary branches of education.

For a District Agricultural School, that would have a farm attached to be managed as a Model Farm, there should be accommodation for, perhaps, about one hundred pupils; of which there might be one-third non-working, and paying in money for their board and instruction, and two-thirds working pupils, who would pay by their work for their instruction, board and lodging. For such a school, two masters at least would be required, one a Professor of Agriculture, who understood perfectly the sci-

ence and practice of husbandry, and the several branches connected with it—could deliver lectures on agriculture, and take the entire superintendence of the farm, stock, dairy, and all the field work—having a first-rate ploughman under him, who could instruct the pupils in that operation, in seed sowing, and act as foreman under the Professor. As regards gardening, perhaps it would be better to have only what is known as a kitchen-garden for supplying the College with all necessary vegetables, and this could be managed without the expense of a regular gardener, by the pupils, under the chief guidance of the Professor, and with the assistance of a laborer accustomed to work in gardens. In order to avoid large expenditure, there should not be a numerous staff of officers employed in the commencement, but should consist of the Professor of Agriculture, who would act as Principal of the School and Model Farm. There should also be employed a well qualified master for the school, and by having the pupils properly classed, they would assist each other, and we conceive that one schoolmaster would be amply sufficient. Perhaps it might be proper to have different school hours for the money-paying pupils and labor-paying pupils, but all should be present at agricultural lectures. Both the Principal and Schoolmaster should be complete masters of the English and French languages, as there would be of course, both English and French pupils to instruct, and those who only understood English should be taught French, and those who only understood French should be taught English.

At the Royal Agricultural College of Cirencester, England, no pupils are admitted under the age of fourteen years, and must, previously, be thoroughly well versed in the routine of a good English education, and before their admission, they are required to pass a strict examination in the following subjects:—The construction of an English sentence; geography; the first four rules of arithmetic, simple and compound; reduction; proportion;

interest; vulgar and decimal fractions. If similar regulations were established here, the business of instruction at the Agricultural Schools and Model Farm would be much more easy to accomplish. Indeed, it would be absurd to admit pupils without their having been previously instructed in the first rudiments, otherwise, all their time would be taken up and fully occupied to acquire these rudiments. The machinery of a Model Farm would be too expensive to be employed to teach boys their A. B. C. The country schools are ample for the purpose of teaching the first rudiments, and we should be very sorry to see what we may denominate as an Agricultural College occupied with little boys learning to read and write. There is not admission to Colleges in any country without a strict examination of the candidates, as to their acquirements in the first branches of education, and we hope there never shall be to Agricultural Colleges in Canada, without a similar examination. An Agricultural School or College should be something worthy the ambition of a young man; and this it never would be, were all admitted without the necessity of any standard of previous education. Fourteen years of age is the earliest age that should qualify them for admission; and any young man who would be able to pay for his instruction at the Agricultural School or College, should be well advanced in his education at that age. The course of instruction at Cirencester extends over two years, and no pupil can proceed to a final examination under that time. The same regulation might be adopted here, provided the pupils were obliged to qualify as to their education, by an examination previous to admission, as we before stated, though, perhaps, this examination need not be so strictly enforced in respect to pupils who were to work for their board and instruction, as it might not be actually necessary.

The College of Cirencester is said to be beautifully situated, and within one mile of the town of that name, in North Wiltshire.

It has a farm of 480 acres attached, of varied character and soil. The ground slopes in every direction, and a more healthy or beautiful site could scarcely be found. Cirencester is a Station on the great Western Railway, and has communication by railroad with every part of the kingdom. We give an illustration of the College at the head of this article, to show what can be done for agriculture in other countries. In addition to practical agriculture, the various sciences connected with it:—chemistry, botany, geology, natural history, natural philosophy, surveying, &c., are taught by the Professors. A well appointed Laboratory, conducted upon the Gleeson system, gives every facility for chemical manipulation.

The object of the Institution is to provide such a course of instruction as will be most useful to the practical farmer. The benefit to be derived by the agriculturist from a judicious application of scientific information, are becoming daily more and more extensively acknowledged, and there are not any means of obtaining this information, except at such an Institution as that of Cirencester. The instruction at this College in each department is conducted in strict subordination to the object proposed; every subject is treated in such a manner, and to such an extent, as its bearing on agriculture demands. The theoretical and practical teaching go hand in hand, and the whole is combined with collegiate discipline. The best established system of tillage is adopted, and the breeding and feeding of stock in combination with a dairy. Every description of trial and experiment is made in such a manner, however, as not to risk general results, it being the determination of the Council of the College, that the system pursued upon the farm shall be the most profitable, and such as the pupils may adopt with confidence in their future occupations; but still a small portion of land is set apart for experiments. The farm buildings are excellent. The management of the College is committed to the

Principal, who is responsible to the Council for the general well-being of every department. He has all matters of discipline under his immediate control, and vigilantly superintends the industry, progress, and moral habits of each student, reports of which are sent, at least, half-yearly, to the parents or guardians. A regular attendance at the Parish Church on Sundays is required, but the sons of dissenters may respectively attend such places of worship as their parents shall, by letter to the Principal, request.

Course of Instruction. The theoretical department comprises:—1. Oral instruction in practical agriculture. 2. Elementary geometry applied to surveying, levelling, cubage of solids, &c. 3. *Mechanics applied* to agricultural implements, to the erection of sheds, and construction of roofs, &c. 4. *Hydraulics applied* to draining and irrigating. 5. Designing and drawing of plans for implements and buildings. 6. Chemistry and general physics, in their various important relations to agriculture. 7. Geology and mineralogy, do., do. 8. Botany, vegetable physiology, and natural history, do., do. 9. Principles of veterinary art. 10. Methods of farm accounts.

Practical Instruction. The students spend the half of each day on the farm, and take part in all the manual operations of husbandry. They have the advantage of becoming acquainted with the construction and working of the best implements. They are charged in succession with the superintendence of the various routine works on the farm, such as the labour, the teams, the stables, the cattle houses, &c., &c.

There is a library, museum, and laboratory for the use of the students. There are non-resident students, who pay an annual fee, and have the same privileges of instruction, and hearing lectures, as pupils residing in the College. There are two vacations in the year, one in July, and the other at Christmas, but it is only at the latter period that a vacation should be allowed

here. Although the plan adopted at the Royal Agricultural College of Cirencester might not be exactly suitable for us here, yet there is much of it that might be adopted advantageously. The mode of instruction might be the same, and the examination previous to admission should also be the same. It would be better that we should not have an Agricultural School or Model Farm, unless it is placed upon a proper footing, and set to work, so as to answer the end proposed. It is not necessary to go into a long description on the merits and usefulness of these institutions, as the fact of their being so, is very generally admitted, and what remains now to be done, is to provide for their establishment. There is a circumstance which should not be forgotten in the selection of a site for an Agricultural School and Model Farm, that it would be most desirable to choose a beautiful situation, possessing every attraction that was possible to attach students to a country life. This may not be considered of much importance with some parties, but we humbly conceive it will have a very great influence in creating a desire for agriculture, and a country life, with young men, who, if sent for instruction to an Agricultural School and Model Farm, possessing no advantage of beauty of situation or scenery, might become quite disgusted with farming, and despise it more than he had ever done before. It may be very difficult to be able to select a situation possessing all the advantages that would be desirable; but in that case it is only possible to choose one with as many advantages as can be obtained. It is the many delightful situations in the country that attach men of education to a country life, and prompt them forward to create, by improvement, similar situations, if they do not inherit them, or cannot obtain them by purchase. It is our firm persuasion that an Agricultural School and Model Farm, having the advantage of a beautiful situation and scenery, and convenient access, would have three pupils for one, that a school without these advantages would have.

It will be seen from what we have now submitted, what, at least, are some of the requirements for these establishments. The Lower Canada Agricultural Society might elect a Committee, as they have done for the Model Farm at La Tortue, to visit and superintend the establishment, as is the duty of the Council of the Royal Agricultural College of Cirencester. Or the Minister of Agriculture might select such parties as he thought proper to do this. The Principal or Professor should be a thorough scientific and practical farmer, as upon him would depend chiefly the successful working of the whole establishment. He should be competent to deliver lectures on all the branches of agriculture; in fact, he should be a man of great acquirements, to be able to fill the situation with advantage to the pupils, and the public at large. The next would be the Master of the School, who should also be fully qualified for the situation, and a complete English and French scholar. He might select assistants from the oldest and best qualified of the pupils, and put them at the head of classes. The next in rank would be the Foreman, or head ploughman, seed-sower, &c.; and it is fortunately much less difficult to find a suitable person for this situation, than for either of the former, but he should be fully qualified. A dairy maid of experience in dairy management, is not the least necessary of the heads of departments, but, though difficult it is possible to find one, nevertheless. The live stock, implements, library, museum, laboratory, &c., we have already referred to in former numbers, but we shall do so again. We do not think it would be necessary that any language should be taught in the schools except English and French, nor do we think the course of instruction should proceed further than that we have enumerated. If pupils wish for a higher degree of instruction, they should acquire it in other institutions of learning. As regards the practical work on the farm, every work done should be executed in the best manner possible. There should not be any excuse admitted for any

neglect in this respect. The best system of rotation and cultivation should be introduced, and worked out in the best possible manner. Economy should be the rule in every thing, and no waste permitted in any thing. The live stock of every description should have the greatest care, and the various breeds of pure blood carefully preserved, so that, any party desiring to purchase one of any particular breed, would be sure to obtain one, and no mistake, but some mixed breeds should be kept for experiment. Experiments made with live stock or crops, should be most carefully noted down, and every particular that would have any influence on the result recorded. These records might be kept by the students. Experiments are of no use whatever, unless every particular connected with them is reported. In experiments on crops, it is necessary the quality of the soil should be known; its state previous to the commencement of the experiment, the drainage, exact mode of cultivation, manure applied, what quantity of seed made use of, what variety of any species, time of sowing, what the after management to the time of harvesting, and final results. With live stock the same care is to be observed. Stock reared on the farm should have the mode of keep described from the time they were born; except when on pasture they should have separate mangers, where one could not take any part of the food of the one next to it. The produce of milk and butter from each variety of breeds should be carefully recorded, and at what age this produce began to diminish should be known, in order to ascertain to what age dairy cows may be kept to advantage. In fattening for the butcher, the breed, the age, the state and weight of the animal, when put to fatten, should be entered, and the time of fattening, and quantity and quality of food consumed, recorded, as well as the weight and price when sold. It should be the same case with sheep and swine, each breed should be experimented upon, careful records kept of all the products and consumption of food, by each distinct species and breed, with the final results.

All this may appear a difficult matter to accomplish, but it appears to be more so than it really would be in practice. The chief point is a systematic regularity, with properly prepared books. The pupils should rather find a pleasure in keeping these records, but at all events, they should be obliged to do so, and it should be made a part of their instruction and training. There are many details which we do not enter into at present; but we were anxious to submit some of the principle points that will have to be considered in providing for Agricultural Schools and Model Farms. We do not pretend that our plan would be perfect, but it may induce others to bring forward one that would be more perfect.

In a former number, we stated that £4000 would be sufficient for the establishing an Agricultural School and Model Farm, of 200 acres, and it might be in some situations, but assuming that one should be near the city of Montreal and one equally near Quebec, which we conceive is the proper place for each of these districts, the expenditure should necessarily be larger, and suppose that £6000 would be required for each establishment. This money, however, would not be lost, but would be as safely invested as it was possible for it to be, in land that would be improving every day, and in choice stock that would bring good prices. Indeed we have no doubt if the establishment was under competent superintendence it would pay well for the capital invested after the first year. The money-paying pupils would clear their own expenses for instruction, board, &c., and so should the labouring paying pupils. As we gave an inventory in a former number of live stock, implements, &c., that would be required, it is not necessary that we should do so again, although a larger expenditure than our estimate at that time may be required.

In concluding this long article we take leave to state, that it would be impossible to promote more effectually the interest and well-being of the Agricultural Classes, and the general prosperity of the country, than by providing the means of acquiring a thor-

ough knowledge of the science and practical art of Agriculture. Disappointment may frequently result from the best education in other arts and sciences, but good only can result from an Agricultural education, and this circumstance alone should be sufficient to recommend it to the attention of Governments and Legislatures. There cannot be any mistake as to the benefit to be derived, from teaching the art of cultivating the soil in the best manner, and managing domestic animals so that they will yield the largest returns to their owners. This education has a further recommendation, that it would create an attachment to the country and a country life, and induce men of capital to settle in the country when they would know how to improve it profitably. These are simple facts that cannot be controverted, and it now remains with those who possess the power to act in this matter, that is of such vital importance to the land we live in.

There are not many who wish the general improvement and prosperity of agriculture in Canada, who will not admit of the great necessity of the publication of a regular periodical altogether devoted to this object, to be circulated as widely as possible throughout Lower Canada. Though general education may not be as far advanced as we could wish it, yet, there are not many farmers' houses, that have not some individual of the family capable of reading, and we rejoice to perceive the extraordinary efforts that are being made to provide for the instruction of the rising generation in this country. The colleges and schools erected in Montreal alone within a few years cannot be surpassed, or perhaps equalled, in any city of equal extent upon this continent, and they are not constructed of wood or perishable materials, but of stone covered with mettle. Indeed, if education has been too long neglected, there appears now to be a general disposition to make up amply for lost time. This circumstance alone is calculated to afford us encouragement when writing for this Journal, that our labor will not be in vain, but

that what we prepare will have a chance to obtain numerous readers. It has often been objected to this Journal, that those for whose use it is principally designed do not or could not read it, nor derive any advantage from it. But we can tell such objectors, that it is received and read in some of the remotest parishes of Lower Canada, and has been the means of creating a desire for improvements in husbandry, where never before thought of. The Agricultural Journal, published by the Lower Canada Agricultural Society, has not been productive of any jealousy, or distrust as to its object, as the motive of the Society in publishing cannot be mistaken by any one who reads the Journal. Its columns are entirely confined to matters connected with agricultural improvement, and the prosperity of the rural population, and does not interfere with other interests, or with politics or parties. It appears to us a very extraordinary circumstance, that this Journal, being the only agricultural publication in Lower Canada, should not have the support of every farmer in the country who could read, as subscribers to it, whatever may be their acquirements as practical agriculturists.

There is much said about the advantage of promoting agricultural improvements, and of the lively interest entertained by farmers to forward the improvements that are necessary in Canadian agriculture; but if this feeling was general and sincere, we should have a thousand subscribers to this Journal for every hundred there are now. The subscription is only five shillings annually, and one would suppose that this amount would not prevent any farmer, however poor, who could read, from subscribing. It appears to us an unaccountable inconsistency, excusable only on the grounds that this Journal would be calculated to propagate error instead of useful information.

We state, without fear of contradiction, that the Agricultural Journal for one year, will contain more useful agricultural information for one dollar, than can be obtained in any other way for the same amount. We have sources to make selections from equal to any that may be at the disposal of any other agri-

cultural publication, and though all the original matter prepared by ourselves would be valueless, the selections and correspondence would amply compensate any subscriber for his five shillings.

PLOUGHING MATCHES.

There were many objections made last fall to the Lower Canada Agricultural Society, giving ten prizes in each class at their Ploughing Matches, but we find from one of our last exchange papers, that at a late Ploughing Match in Scotland, held by the Eastern Forfarshire Agricultural Society, they adopted the same plan in giving ten prizes in one class, for which there were fifty competitors. We do not by any means advocate offering so many prizes in each class, particularly if there were not, at least, six or eight competitors for each prize. We therefore conceive it would be the better way, not to offer more than five prizes in each class, and to make it a condition, that unless there was a certain number of competitors, the prizes would be diminished in proportion. We also think that there should be two classes for old country ploughmen, and two for Canadian. One for men over twenty-one years of age, and the other for young men under that age. Or if this plan was not approved of, some other might be adopted, such as allowing those who had gained prizes at former Ploughing Matches to compete together, and those who had not gained any prize previously, to compete in the second class; the prizes to be equal in both classes.

RAIL-ROADS.

However desirable it may be that rail-roads should be constructed wherever required, for the improvement of the country, we should be sorry to hear that any unpaid labor should be contributed towards this object. As it is probable that a large amount will be expended on the construction of rail-roads within the next few years, we conceive it would be very desirable that every precaution should be

adopted to prevent the possibility of the laborers employed, suffering any loss of their just claims by contractors. It will be in the power of the Government now to establish such regulations as will prevent principal or sub-contractors from withholding any of the wages earned by laborers upon rail-roads constructed by public funds. The employment of emigrants is not the least advantage to be anticipated from the building of rail-roads, but it would be a great and cruel disappointment, that after severe toil at these works, when the pay day came, if their wages were not forthcoming. Contractors, whoever they may be, should be obliged to furnish satisfactory security for the payment in full of any wages earned by laborers upon their works, unless there was some just cause proved for withholding it.

BREEDING HORSES.

It would not be difficult to prove how much more profitable it would be to breed horses, for which there is a constant and improving market, than to keep land under hay, to sell at a price that will scarcely pay the expenses of harvesting and bringing to market. It is not this year only that hay is below the remunerating price, but it very seldom sells for a price that is remunerating. The only remedy is to employ the land or the hay in feeding stock, and raising horses, and not to glut the market with an article for which there is not sufficient demand. The breeding of a good description of Canadian horses, would, perhaps, be as profitable a business as could be carried on upon the farm; but it would be necessary that there should be suitable stable and yards, and the most careful attention to prevent accidents, by which young horses may be rendered worthless, and greatly diminished the profits of breeding.

In reply to the enquiry of the Boston "New England Farmer," relative to the Model Farm of the Lower Canada Agricultural Society at La Tortue, we beg to state, that the Society only obtained possession of

the Farm in September last, with all the stock and implements then upon it; and in consequence of the uncertainty of their continuing to hold the Farm after the termination of the first year, there has not been any work executed except Fall ploughing, nor has there been any change made in the stock until it is decided whether the Society shall continue to occupy the Farm, consequently, the Farm and live stock are exactly the same as when they received them from the proprietor. The Editor of "The New England Farmer" will find in this number and in the last, our ideas respecting District Agricultural Schools and Model Farms, and also Mr. Ossaye's, the superintendent of the Model Farm, report on "The Necessity of an Agricultural Education," and we shall be glad to see the opinion of our Boston friends on these subjects. We again beg to return thanks to the Editor of "The New England Farmer," for kindly exchanging that valuable periodical for this Journal. It is very desirable that a friendly intercourse should be maintained between Agriculturists in all parts of the world, as there are no grounds for the existence of envy or jealousy between them.

The Committee for superintending the Model Farm at La Tortue are reminded that the first Wednesday in April, the 7th instant, is the day appointed for their meeting at the Rooms of the Society.

We beg to intimate that this number of the Journals shall be forwarded to and the last Presidents of County Agricultural Societies in Lower Canada, in order that they may be acquainted with the proceedings of the Agricultural Congress, which took place at Montreal on the 10th February last; and it would be very desirable that the Presidents of County Agricultural Societies should communicate their views on the Resolutions adopted by the Congress, particularly those that had reference to "Agricultural Education" and the establish-

ment of Associations of Agricultural Credit" Those two subjects are considered to be of great importance to the Agriculturists of Canada, and it would be desirable that there should be a general expression of opinion either in favour of them or against them. The County Agricultural Societies may be supposed to represent the rural population, or at least they ought to do so, and the Presidents of these Societies would be the proper medium of communicating their views to the Provincial Society, and by this union and co-operation, their representations would come before the Government and Legislature with more weight, than they would from any one society. It cannot be expected that Agricultural Schools, Colleges, and Model Farms, will be established at once to meet the wants of the country, but it would be well that a general expression of opinion should be manifested as to the necessity of their introduction. At a very trifling expense, Agricultural Class Books, and Catechisms might be provided for all the country schools for the reading and study of the scholars. This would give them a taste for Agriculture, and remind them that there was such a study as the science and practice of Agriculture, and that they could not become successful farmers without a thorough knowledge of the science and practice. The greatest bar to the progress of Agricultural improvement is the low estimation in which it is held. If it was considered necessary to be regularly educated for it as for other professions. (which it certainly is) it would be estimated at its proper value, the first and most honorable of all professions.

In consequence of not knowing the address, of many of the Presidents of the County Agricultural Societies, we find that several of the letters we addressed to the Presidents of County Societies, some of them to the care of other parties, did not arrive at their destination in time to admit of many of these gentlemen being present at the Agricultural Congress on the 10th February last. It would be very desirable, now that the Presidents of

County Agricultural Societies have been elected Honorary Members of the Lower Canada Agricultural Society, that they should communicate to the latter Society the names and address of each of the Presidents, in order that, when future communication is necessary, there may be no mistake in the address.

In the last Number we had not space to insert any remarks on the letter of "G" on Canadian manufactures. It is certainly a subject of vast importance to Canada, and under the present circumstances of our trade, we do not see any alternative left to us, but that of manufacturing all we can, for the supply of our own wants. At some period the country will have to do this, and we may as well commence in time to manufacture from our own products, for our own use. It appears an absurdity to send raw produce a distance of 3000 miles, and import some of this same produce in a manufactured state an equal number of miles back. Perhaps that we are not warranted in assuming this to be the case to any great extent at the present moment, but, certainly, this country is capable of producing largely wool, flax, hemp, iron, the material for making sugar, and many other articles that would, when manufactured, meet an extensive demand for the supply of the people of Canada. We shall be glad to hear from any correspondent upon any subject connected with the productions or manufactures of the country, or any thing else calculated to advance the interests, prosperity and happiness of the people.

In one of our exchange papers from England, we have seen a report of an experiment made in the cultivation of mangel wurzel. In a field where the soil was of similar quality, and the cultivation and manuring equal, three or four acres was drilled at thirty inches apart, and mangel wurzel seed sown in the usual manner. In the land adjoining, the drills were made at twenty-four inches apart, and carrot and mangel wurzel seed sown in every alternate drill. When the crops of mangels

were taken up, that produced, where sown only in every second drill, was as great as that where sown alone, and there was eight tons of carrots to the acre, grown with the mangel wurzel, so that one acre of mixed crop produced eight tons of roots more than the acre where the crop was unmixed. This experiment is of some consequence, and deserves a trial here. We have no doubt that growing a diversity of plants in alternate rows will produce more than where one sort of plant only is cultivated. Of course it is only in root crops this can be done, and perhaps with oats mixed with beans or peas, or the two latter mixed together. If, after they are threshed, it is desired to separate these grains, it can be done by suitable wire sieves, but these grains may be ground up together for feeding to horses, meat cattle, sheep or swine. There cannot be any doubt that horse beans, sown broadcast with either peas or oats, succeed well, as also do peas and oats sown together. We, however, would prefer seeing beans cultivated in drills as a cleaning crop, and preparation for wheat or barley. There are some cases where the farmer may be unable to cultivate beans in drills, and he may grow a profitable crop by adopting this plan of sowing the mixed with peas or oats.

A. L. H. Latour, Esq., has handed us the letter from J. H., a gentleman in Boston, for insertion in this Journal, which will be found in page 106. We shall always be glad to publish letters from friends who may take an interest in our agricultural affairs, and we hope this gentleman will again favor us, or our friend, Mr. Latour, on any subject connected with the progress of agriculture. It greatly increases the interest of a Journal of this description to have able Correspondents who know how to express their ideas.

Mr. Perry, manufacturer of the splendid Fire Engine which obtained the Gold Medal at the Great Exhibition in England, last year, invited us to see a collection of samples of seeds, (chiefly agricultural,) which he has

brought from that Exhibition to Montreal. His collection comprises many valuable varieties of seeds, that we conceive would be well adapted for this country, particularly those from Russia. Amongst the latter is a sample of Black Sea wheat, and it is only necessary to compare it with what is grown here as Black Sea wheat, to see the necessity for importing fresh seed direct from the ports of the Black Sea. Mr. Perry has some beautiful samples of Australian wheat and barley, the finest we have ever seen, particularly the wheat. It would be very desirable, indeed, that these seeds should be carefully cultivated this spring, in order to ascertain how they would succeed in Canada. Mr. Perry is entitled to great credit for the trouble he has taken, and it will be an extraordinary circumstance, if he does not find willing purchasers that will pay him liberally for his seeds. He informed us that he lost one case of seeds of considerable value, by getting wet in the ship, on the passage out. We recommend agriculturists to call on Mr. Perry, and take advantage of the opportunity of obtaining seeds, which may never offer again. There is only a small quantity of each, but by careful cultivation, all those that would succeed in our climate, might be vastly increased in the course of even one year.

We shall in future publish the names of all new members of the Lower Canada Agricultural Society, and we are happy to commence the new list with the name of the Right Rev. F. Fulford, D. D., Protestant Lord Bishop of Montreal, who has become a Life Member of the Society, his Lordship's son, — Fulford, Esq., Ovide Leblanc, Esq., M. P. P., André Ouimet, Esq., D. E., Papineau Esq., C. Chappais, Esq., M. P. P. as annual Members. His Grace the late Archbishop of Quebec, and the present Roman Catholic Lord Bishop of Montreal were Life Members from the first organization of the Society. That these high Church Dignitaries should become Life Members, is, we conceive, highly creditable to the Society, as it is a proof that they regard with

approbation the labours and objects of the Society. It will, we hope, act as an encouragement to others to become members, and particularly the clergy throughout Lower Canada, whose example would have the very best influence. The subscription for an Annual Member is only five shillings, and the poorest Clergyman in the country could afford to pay that small amount to forward the general improvement of agriculture. They cannot have any reasonable objection to belong to a Society of which their Bishops are Life Members. Clergymen are supposed to be as well, if not the best educated men in their respective parishes, where they reside, and their union with the Society would be a great encouragement to other educated men to become members. It is by the union and cooperation of the educated, that the general improvement of Canadian agriculture can be best promoted, because they will understand what means are necessary to be adopted to accomplish this object.

At the last Quarterly Meeting of the Directors of the Lower Canada Agricultural Society, Henry Wager, Esq., President of, and John Delafield, Esq., Ex-President of the New York State Agricultural Society, were unanimously elected Honorary Members of the Lower Canada Agricultural Society. Also at the same meeting, J. B. Trudelle, Esq., Secretary of the County of Quebec Agricultural Society, and — Johnson, Esq., son of T. B. Johnson, Secretary of the New York State Agricultural Society, were elected Corresponding Members.

AGRICULTURAL REPORT FOR MARCH.

The month of March, to this date, has been cold and stormy generally, and if we have any faith in the old saying that "when it comes in like a lion it will go out like a lamb," we may expect the end of the month to be fine. We certainly have frequently seen this old saying prove to be correct. We have had our full proportion of cold weather and snow this winter, and, therefore, we may hope that there shall not be much more of it, and that spring will commence early and auspiciously.

Farmers will doubtless be fully prepared to commence work when the land is ready. It is a great advantage in agriculture, as in other matters, to be early in the field. The working season is short here, but, nevertheless, it affords sufficient opportunity generally to the active and industrious farmer to finish his various works in proper season. It will greatly facilitate the spring sowing and planting, to have the manure carried to the fields, where it will be required, and carefully piled there. It is frequently very difficult to cart manure in spring, the land being so wet and soft, and this retards the sowing and planting considerably. However prudent it may be to put off the time of sowing wheat until the latter end of May, there is no necessity to delay the sowing of any other crop. As we have repeatedly recommended, oats should be sown the moment the soil is in a fit state for the harrow; peas, beans, carrots, mangel-wurzel, parsnips, potatoes, and Swedish turnips, may all be sown before the first of May, if the weather is favorable and the land prepared for them. The application of salt for any of these crops will be found useful, at the rate of from five to six bushels to the acre. Unless the season is very favorable barley should not be sown until after the first of May, and we hope farmers will not neglect to sow a due proportion of this grain where the soil is suitable. If there is not Canadian consumption for it, there is every reasonable probability that there will be a good demand for it for the United States. At all events it is an excellent grain for farmers to grow to feed to cattle and pigs, but not in a raw state. It should be coarsely ground, and have boiled water put upon it, and be allowed to stand in a covered vessel, until nearly cold, before it is fed to cattle or pigs. It also answers well ground up with peas, beans, or oats, but the mixture should always have boiling water poured over it before it is made use of. In stall-feeding cattle, whatever quantity of roots the farmer may have, he will find the animals will become fat much sooner, and make better beef, by giving them a mash or two of ground, oats, barley,

beans, or Indian corn, daily. The quantity need not be large, but it is profitable to give some. The low price of hay and straw, and the high price, or, perhaps, we should say the remunerating price, of horses, butchers' meat, and good butter, may be an inducement to farmers to make some change in their system of management this year. There is no doubt that our market for horses, cattle, sheep, pork, and butter, is likely to improve, rather than get worse, notwithstanding the heavy duty that is payable on these products, on importation into the United States. Though extensive that country, the produce of her lands is insufficient to supply all the means she possesses of disposing of it, by the consumption of her own population, and by her commerce. When we came to Canada, there was a large importation of horses, beef, pork, mutton, cheese, butter, poultry, and other things to this country from the United States. The case is now exactly reversed, and we send all these articles to the United States, and there is every probability that this new market is likely to increase every day. This is an encouraging prospect to farmers, and it is very favorable also to the United States, to obtain so conveniently what they find it necessary or advantageous to purchase.

These circumstances are a convincing proof that our Agriculture is not retrograding. During the last shortly four years, the population of the province has more than doubled, and while with a small population we required to import a large portion of our food, with our increased, population, and with a greatly diminished production of wheat, we now export a considerable quantity of the produce of agriculture. Indeed Lower Canada, considering the immense amount of loss the farmers have sustained by nearly the total failure of her principle crop wheat, for about fifteen years, have just cause of congratulation at their present condition, and at the prospect of been able to overcome, or, at least, remedy, in a considerable degree, by the introduction of new varieties of seed; the difficulties of producing wheat successfully. We have often thought that, per-

haps the visitation of the wheat fly, may ultimately prove advantageous, by causing a more improved and careful system of husbandry, the raising of green crops, sowing clover, and keeping more live stock, all so essential to good husbandry. When the wheat crop was the chief object, it necessarily produced a defective system of agriculture, there were no green crops, and scarcely any clover or timothy sown, but one half the farm was under wheat, and the other half, growing weeds and natural grass, pastured by a few cattle and sheep, and in the fall ploughed up again for wheat.

This system, we rejoice to say, is changing fast for a better, and the change will every day become more extended. There are in every section of the country, Canadian farmers introducing an improved system of husbandry that cannot fail to operate favorably on the general improvement of agriculture. The friends of agriculture will rejoice to hear this statement, which they may be assured is a fact, and we have not any doubt, that in a short time the cultivated lands of Lower Canada will yield as large an average produce annually, as the same extent of land in any portion of North America. There may be other countries favored with a more sunny climate, and less frost and snow, but Lower Canada, under a good system of husbandry, can compete successfully with any of them in the gross amount of her agricultural products. Our soil is of excellent quality, our climate good, and whatever may be the opinion of some to the contrary, our rural population is as industrious and frugal as any we have seen on this continent. What we require is, a more general and useful education, embracing instruction in the science and practice of agriculture, and there is now a prospect that we shall soon possess all these advantages, and when we do, the country will soon prove that it is entitled to the highest commendation it has ever received from our humble pen, or from any other, as a country possessing richly all the qualities required for successful agriculture.

It may be urged that, notwithstanding the vastly augmented general agricultural pro-

ducts of Canada, within the last thirty years, farmers have not generally become wealthy in proportion, and are now very deficient in ready money capital. We admit this to be the fact, and to have resulted from causes that can be explained. The disproportion between the value of labor and the price of produce raised by it, is one cause that has prevented the accumulation of capital in the hands of farmers; as also the disproportion between the price of what they have to sell, and what they require to purchase, according to their actual first cost value. This disproportion extends to almost every case where farmers are the payers or receivers of money. To these disadvantages may be added the deficiency of the wheat crops for several years. With all these drawbacks, however, the improvement of the country and the greatly increased amount of her annual agricultural productions is unquestionable. It is quite possible that the country should improve, and her products be greatly augmented, without proportionally increasing the money capital of her agricultural population, and that is the case in Lower Canada. There must be something out of joint to produce these results, and it is only by education, and instruction in the practiced art of agriculture, that these evils can be remedied. It is necessary to the general prosperity of agriculture that agriculturists, as a class, should be educated, or they never can compete on equal terms for the accumulation of capital with other classes that are educated. Educated men, though they may choose to work in the field, will estimate the value of their labour as highly as those who may be employed in other professions and trades, and will not be content unless they are paid in the same proportion. When agriculturists are educated as other classes they will be on an equal footing, but not before, and they will have to submit to many disadvantages until they are in this position.

March 28th, 1852.

We have received the Annual Report of the Restigouche Agricultural Society, referred to in the letter of Dr. George Douglas, published in this number, and we perceive by it, that the Society have offered 111 premiums this year for agricultural products, and domestic manufactures. The report is a very interesting one. The Swedish turnip is found to resist the fly better than any other when sown between the 15th and 25th June. Other varieties may be sown from the 15th to the end of July on burnt land. The following information respecting the breeding of cattle and sheep we copy from the Report. The cross between the Cheviot and Leicester sheep is found to succeed well in Scotland, and the crops between the Leicester and South Down are also approved of in Britain:

The cross between the Durham bull and cows of the country frequently proves a coarse and weak animal, deficient in symmetry, the natural consequence of breeding from a small dam and large sire; while the Ayrshires maintain their superiority with whatever breed mixed. Your Committee, however, are of opinion, that the West Highland are decidedly the most profitable, and best adapted to our climate and present pasture, and when crossed with our best native milchers invariably produce an easy-fed, hardy animal, not inferior in those qualities which constitute a good dairy cow, superior for beef, and weighing heavy for its appearance.

The Leicester sheep are too delicate of themselves, but when crossed by the Cheviot ram, you will have a fine active animal with a heavy fleece; and either of these rams with the ewes of the country, effect a great improvement. Another advantageous cross may be made with the Southdown ewe and Leicester or Teeswater ram, that not only improves the constitution of the sheep and flavour of the mutton, but also admits of bringing the texture of the wool to any staple that may be desirable to suit the market or manufactures of the country.

We beg to direct attention to the translation of the able report of Mr. Ossaye on "The necessity of Agricultural Knowledge," read by that gentleman in the French language, before the Agricultural Congress on the 10th of February last, and which was published in the French Agricultural Journal for March. The report will speak for itself, and requires no recommendation from us. It sets forth, in very forcible language, the necessity of agricultural knowledge, and we hope it will receive all due attention. As the means of diffusing

agricultural knowledge, generally, throughout Lower Canada is not however alternable at once, it would be very useful to introduce Agricultural catechisms, and class books, into the country schools, for the study of the scholars. This would be a sort of preparatory instruction, that could not fail to be useful, though the instruction should never proceed any further. It is, indeed, difficult to account for the neglect of providing an agricultural education, or appearing to think there was any necessity for it, up to the middle of the nineteenth century, though agriculture is the basis of all capital and wealth of the world, and the only means of existence for all the inhabitants of the world.

We beg to direct attention to the advertisement of the County of Montreal Agricultural Society's Spring Cattle Show and Fair. We are glad to observe, that the Society have very liberally and judiciously made their premiums for Stallions open to all competitors. This, we hope, will have the effect of bringing the best description of horses into the county, which is no small advantage.

MAGNETISM.

Most extraordinary and inexplicable discoveries have been made, and are making, as experiments irrefragably prove, in regard to magnetism. They have been performed at Brighton, to the entire conviction of persons of the highest science, both foreigners and British, and are yet altogether so incredible that we almost fear to allude to them as realities. They will, however, come before the Royal Society, at its earliest re-assembling, and be stated in all their details. Meanwhile, what will our readers, and especially scientific readers, think of the fact, that the magnetic force runs in transversè directions as it may be employed by the male or female sex; that is to say, that if in the hands of a male operator it proceeded from east to west, or west to east, the same current in the hands of a female operator would immediately change to from north to south, or south to north, and cut the former line at about right angles. Thus magnetism is shown to drive different influences from the two sexes! But this is not all. A letter written by a woman, weeks before, produces an effect upon the current, of a like peculiar nature. And again, any part of a dead animal, as the horn of a deer, a bit of ivory, and even a dead fly held in the hand of any individual in contact, stops the magnetic action, which silk, the material from living worm, does not interrupt.

In fine their are wonders the most astonishing in store; and it does seem that we are indeed, on the eve of what has for some time been prophesied, viz: penetrating deeply into the profoundest secrets and mysteries of this pervading agent in the whole economy of the universe, the globe we inhabit, and the human kind!—*London paper.*

TO FASTEN THE TEETH.—Put the size of a nutmeg of alum in a quart of spring water for 24 hours, then strain the water and gargle with it.

EXTRAORDINARY COLLECTION OF FROGS.—The following tale is related in a letter to the *Tralce Chronicle*, from a correspondent, who dates from Miltown, county Kerry:—“Two years ago a small field was drained on this property, in the usual manner, with stones. The parallel drains were filled with broken stones, and were conducted into a sub-main drain, which was formed into a conduit of arched stones, leaving an open space of eight inches, and covered with broken stones to the height of fourteen inches. This sub-main wrought well, until about two months ago, when it gradually ceased to discharge any water; and on examining the ground a few days ago, I found the entire surface of the field exceedingly wet. Without delay I caused the sub-main drain to be opened, and found it almost completely choked with—what would you imagine? Roots, or vegetable matter? No: but actually with live frogs, packed one above another, as close as herrings in a barrel, but having their heads all one way up to the drain. The conduit was firmly wedged with them, and the interstices among the stones, above the conduit, were also filled with them, of all sizes. This compact mass of frogs extended the entire length of the drain, which is over five perches, and had they been collected, they certainly would have filled several carts. I have been engaged for years in drainage operations, but never met with anything of the kind before; and I only trouble you with the particulars of this singular circumstance, in the hope that it may induce parties, when draining, to secure the outlet of every drain with a suitable iron grating, to prevent the admission of these reptiles or other vermin.”

INTELLECT DEVELOPED BY LABOR.—Are labor and self-culture irreconcilable to each other? In the first place, we have seen that a man, in the midst of labor, may and ought to give himself to the most important improvements, that he may cultivate his sense of justice, his benevolence, and the desire of perfection. Toil is the school for these high principles; and we have here a strong presumption that, in other respects, it does not necessarily blight the soul. Next, we have seen that the most fruitful sources of truth and wisdom are not books, precious as they are, but experience and observation; and these belong to all conditions. It is another important consideration, that almost all labor demands intellectual activity, and is best carried on by those who invigorate their minds; so that the two interests, toil and self-culture, are friends to each other. It is mind, after all, which does the work of the world, so that the more there is of mind, the more work will be accomplished. A man, in proportion as he is intelligent, makes a given force accomplish a greater task; makes

skill take the place of muscle, and with less labor, gives a better product. Make men intelligent, and they become inventive; they find shorter processes. Their knowledge of nature helps them to turn its laws to account, to understand the substances on which they work, and to seize on useful hints, which experience continually furnishes. It is among workmen that some of the most useful machines have been contrived. Spread education, and as the history of this country shows, there will be no bounds to useful invention.—*Channing.*

SMOKING.

“There is reason in all things,” so says the old maxim. There may be, it is true, but I cannot see any reason or sense in a young man’s loafing round, with a filthy cigar protruding from one corner of his mouth, and a volume of smoke, strongly impregnated with oaths and curses issuing from the other. Yet this is a true picture of what we are daily obliged to witness.—Although much has been said or written, to show how injurious and debasing the habit of smoking is, still almost every young man engaged in the practice of smoking, some one, two, three or more filthy cigars per day. Young man, have you formed this most foolish habit? if you have, leave it off at once, and not be a nuisance in the world, don’t spend your life in filling up the world with tobacco smoke. It will be poor consolation to you, to look back at the close of life, and see that you have left nothing behind you but a cloud of tobacco smoke, for the world to remember you by?

There must be something peculiarly pleasing to the smoker, in reading, “No smoking allowed in this room,” and numerous other similar notices which people are obliged to post up, in order to protect themselves from the encroachments of these pests of society, “tobacco burners.” We should suppose that the feelings of a smoker on reading these notices would be similar to those of a sheep stealer, who, while he was bearing away his booty, heard the cry of “stop thief.” But let those who know by experience, make answer for themselves.—*From the Boston Cultivator.*

CURE FOR A BURN.—Break the bladder to let out the water, take home-made starch of potatoes, (in which there must be no blue stone) add as much sweet oil to make a salve. Spread on a rag and apply it to the part injured.

TO DESTROY WEEDS ON GRAVEL WALKS.—Put an ounce of arsenic in a gallon of hot water, and pour it through the nose of a pot on the walk.

District of Three Rivers, Feb., 1852.

“RURICOLA.”

EMIGRATION FROM THE UNITED KINGDOM.—A parliamentary paper, printed yesterday, by order of the House of Commons, at the instance of Mr. Scott, contains a return of the total number of persons who have emigrated from the United

Kingdom to British possessions or to foreign countries from 1846 to 1850 inclusive. It appears that the total number of emigrants during the five years was 1,216,557. Of these 53,431 were despatched by the Colonial Land and Emigration Commissioners, leaving 1,163,123 as the number which have actually emigrated at their own expense. The number of adults which embarked from Deptford was 22,690, and from Plymouth 29,338. The expense of conveying emigrants sent for embarkation from London within the same period amounted to £8,634 14s. 4d., and from London to Plymouth £52 1s. 6d.

AN ADDRESS TO THE FREEMASONS.

BY ELIZA COOK.

A rich man lived 'mid all that Lite could know
Of Peace and Plenty in our lot below;
His wealth was ready and his hand was kind,
Where friends might sue or rigid Duty bind.
He gave to kindred, and bestowed his aid
Where Right could sanction the demand it made:
But there he paused—his bosom never felt
Compassion's impulse kindle, rise, and melt.
With stoic ease he turned from every cause
That had no claim except through Mercy's laws;
And coldly good, he measured out his span,
An honest, moral, true, and prudent man.

The rich man died—and cleansed from earthly leaven,
Upward he sprang on pinions stretch'd for Heaven.
Onward he soared, and well-nigh reached the gate
Where Angel sentries ever watch and wait;
But there he fluttered—just below the place
Where Bliss and Glory pour their crowning grace;
Striving with hope to gain the eternal height,
And weakly drooping as he sought the flight.
" 'Tis vain," the Angel Keeper cried, " 'Tis vain;
Thou must return and dwell on earth again;
One feather more thy ample wings must wear,
Ere they will bear thee through this ambient air;
Good as thou art, go back to human dust;
Man to be godlike must be more than just."

The humbled Spirit took its downward way,
And here resumed its working garb of clay;
For threescore years and ten it stemm'd Life's tide,
And breathed and thought—the trying and the tried,
Still was he honest, still he loved the best
The ones who claimed the kindness in his breast,
Still was he trusted as the type of truth,
The moral oracle of age and youth,
His love began with mother, wife, child, friend;
But there he found Affection must not end.
His gentle sympathy now turned to heed
The stranger's sorrow, and the stranger's need;
With right good will he ever sought to dry
The tear that dimmed the lonely orphan's eye;
He gave his pity, and bestowed his gold
Where want abided with the poor and old;
He burst the bonds of duty's narrow thrall,
His soul grew wider, and he felt for all.
The rich man died—again his spirit flew,
On through the broad, Elysian fields of blue;
Higher—still higher—till he saw once more,
The crystal arch he failed to reach before:
And trembling there, he feared to task his might,
To travel further in the realms of light.
"Fear not," the Angel Warder cried, "I see

The plume that now will waft thee on to me,
Thy wings have now the feather that alone
Lifts thee created to the Maker's throne.
'Tis Mercy—bounteous Mercy—warm and wide,
That brings the mortal to the Maker's side,
'Tis dove-eyed Mercy defies the dust;
Man to be godlike must be more than just.
Up to thy place." The Spirit soon obeyed
The Angel's word—a tone of music played
In melting murmurs round the field of blue,
As cherubs came to lead the Spirit through.
The crystal portal opened at the strain,
The Spirit passed—the Angel watched again,
Still crying to the short-winged sons of dust,
"Man to be godlike must be more than just."

Ye—willing workers in a sacred band,
Among the noblest in our noble land;
Ye gladly build, in Charity's blest name,
The Christian altars raised to England's fame;
Altars that serve to break the storms that rage
In fearful gloom round poverty and age;
Ye help the helpless with a cheerful zeal,
Ye feel for want as man should ever feel;
Ye shed the essence of your God around,
For God is seen where Charity is found.

Fear not to die, for freely do ye spare
Some of the "talents" trusted to your care;
Well may ye hope to gain the highest flight;
Toward the portal of celestial light,
For if that portal Mercy's plume can win,
Ye bear the pinions that shall let you in.

AGRICULTURAL SOCIETY OF THE COUNTY OF MONTREAL.

THE County of Montreal Agricultural Society offer the following premiums to be awarded at the Fair and Cattle Show, to be held at the Viger Market, in the City of Montreal, on Tuesday the 20th April next, at 11 A. M.

For the best Draught Stallion.....	£5	0	0
For the 2nd Ditto	4	0	0
For the 3rd Ditto	2	10	0
For the best Saddle Stallion.....	5	0	0
For the 2nd Ditto	3	0	0

CONDITIONS.

That the Horses taking Premiums shall stand for the use of Mares in the County of Montreal, at least three days per week during the ensuing season. The owners shall be bound to notify the Secretary of the Society, and otherwise publicly advertise the places where their horses will stand.

That the use of such Horses shall not be refused to a reasonable number of applicants, Members of the Society, at a moderate charge, viz: Not over four dollars per Mare.

The Premiums awarded will be paid at the County Cattle Show in October next, upon the production of Certificate that the Horse taking premium has covered at least 12 Mares during the season.

By order,

JAMES SMITH,

Sec. County M. A. Society.

N. B. Members of the Society and intending Subscribers are requested to take notice, that parties failing to pay their Subscriptions previous to the 1st August, cannot exercise privileges of membership, compete for Premiums, &c., and as this rule will be rigorously carried out, parties are earnestly urged to govern themselves accordingly.

Montreal, 16th March, 1852.

PROVINCIAL MUTUAL AND GENERAL INSURANCE COMPANY.

OFFICE,—CHURCH STREET, TORONTO.

INSURES in its MUTUAL BRANCH, Farm Property and Detached Buildings,—all extra hazardous Risks being excluded.

The PROPRIETARY BRANCH includes Fire Insurance generally, as well as Inland and Ocean Marine Insurance and Life Insurance.

WILLIAM EVANS, Jun., Agent for Montreal, will receive applications for Insurance, in writing, addressed to him at his residence, Côte St. Paul, or left for him at the hardware store of **J. Henry Evans, Esq.,** St. Paul street, Montreal.

AGRICULTURAL WAREHOUSE.

THE Subscriber has constantly on hand, Samples of various kinds of AGRICULTURAL IMPLEMENTS, among which will be found, Ploughs, Cultivators, Seed Sowers, Straw Cutters, Corn Shellers, Subsoil Ploughs, Vegetable Cutters, Thermometer Churns, Horse Rakes, &c. &c. Expected by the opening of the Navigation, a large assortment of *Cast Steel Spades and Shovels, Cast Steel Hay and Manure Forks, Hoes, &c., &c.*

Agent for Sale of *St. Onge's Patent Stump Extractor.*

P. S.—Any kind of Farming Implements furnished to order, on the most reasonable terms.

GEORGE HAGAR,
103, St. Paul Street

Montreal, 1st April, 1851.

IMPORTANT TO FARMERS.

THE Subscriber offers for sale the following seeds:—

- 7,000 lbs. Dutch Red Clover,
- 1,000 do. French “ “
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- 500 do. Shiromy's Purple Toppe Sweedish Turnips,
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- 200 do. Laing's Improved “ “ “

The above varieties of Turnips warranted from Rape.

- 400 lbs. Mangle Wurzel,
- 100 do. French Sugar Beet,
- 200 do. Aberdeen Yellow Turnip,
- 200 do. White Globe Turnip,
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- 200 do. Attringhasor “ “
- 200 do. Long Orange “ “
- 100 do. “ Surray “ “

The Carrot Seed are the growth of Canada, from the Subscriber's Nursery Ground.

—ALSO,—

His usual supply of English and French Garden Seeds.

GEORGE SHEPHERD.

Nursery and Seedsman to the Agricultural Society of Lower Canada.

March 1st, 1852.

LOWER CANADA AGRICULTURAL SOCIETY,

Office and Library at No. 25 Notre Dame Street,
Montreal,

Over the seed-store of *Mr. George Sheppard, the seedsman of this Society,*

THE Secretary and Treasurer of the Society is in attendance daily, from ten to one o'clock.

The Library has already some of the best works on Agriculture. Also, the Transactions of the Highland and Royal Irish Agricultural Societies, the London Farmer's Magazine, the Transactions of the New York State Agricultural Society, and many other British and American Agricultural Periodicals which are regularly received. The Agricultural Journal and Transactions of the Lower Canada Agricultural Society, both in English and French are to be had at the office from the commencement in 1848, up to the present.

All communication in reference to the Agricultural Journals from the first of January, instant, to be addressed post-paid to **Wm. Evans, Esq.,** Secretary of the L. C. A. S. and Editor of the Agricultural Journals.

Members of the Lower Canada Agricultural Society are respectfully requested to pay up their annual subscriptions immediately.

WM. EVANS,

Secretary and Treasurer, L. C. A. S.

1st January, 1852.

Copies of *Evans' Treatise on Agriculture*, and the supplementary volumes both in English and French to be had at the office of the Society with complete files of the Lower Canada Agricultural Journal for the years 1844, 1845 and 1846.

MATTHEW MOODY,

MANUFACTURER OF

THRESHING MACHINES, REAPING MACHINES, STUMP AND STONE EXTRACTORS, ROOT CUTTERS, REVOLVING AND CAST-STEEL HORSE RAKES, PATENT CHURNS, WAGGONS, &c. &c. &c.

THE Subscriber has been employed since 1846 in manufacturing his improved **THRESHING MACHINES**, with Horse power. He was awarded the highest Prize at the Terrebonne County Exhibition after competition with many others. They have threshed and cleaned, with 2 horses, from 100 to 124 minots of Wheat per day, and from 200 to 250 of Oats, and have given universal satisfaction. He guarantees all purchasers for any recourse by **Paige & Co.,** of Montreal, who allege having a patent for these machines, dated December, 1848! and warrants them equal to any made here or elsewhere, for efficiency and durability.

One of his Reaping Machines may be seen at **Kerr's Hotel, St. Lawrence Street,** price £25.

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Threshing Mills constantly on hand. Two second hand Mills, in warranted order, cheap for cash.

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