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THE

CANADIAN AGRICULTURAL JOURNAL.

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We beg leave most respectfully to congratulate our Subscribers and friends on the commencement of a New Year, and most heartily we wish them all possible health, prosperity, and true happiness. We certainly have great cause for congratulation, in the advantages we possess in this country, and if every individual who enjoys these advantages, or rather, we should say, who may enjoy them, would do their duty to the community to which they belong, as their situation, circumstances or influence, may afford them opportunity, we would see this country one of the most prosperous, and happy on earth. Good feeling, and union, in promoting what would be for the general advantage of all classes, is what is required—but unless we are united, and well disposed towards each other, we cannot reasonably expect that we can act for the general good. The commencement of a new year is the proper time to form resolutions that we shall do all in our power to promote the public, as well as our individual interests. We do not propose that every man or any man, should neglect his own interests or business to forward the public interests, and we are aware that there are not many individuals who, however well disposed, can do much more than attend to their own affairs. But to those who have opportunity, by the possession of education, wealth or influence, to advance the public good, we should say that an obligation rests upon them, as accountable beings to their Creator, and to their fellow men, to employ their best endeavours to promote the public good, and we tell them plainly that party feelings, and animosities, will not excuse them from this obligation, either to their Creator, or to their fellow man. A man who has the power, and opportunity to do good, and neglects to do so, from whatever cause is inexcusable. As we before observed, it is only a few who have it in their power to do much, but these few will not do their duty to the community to which they belong, if they devote themselves entirely to their own interests, or the party to which they become attached. Perhaps the principal cause of the backward state of agriculture in Canada is to be attributed to disunion, and want of cordial action amongst our leading men, and legislators. Commerce did not suffer so much from this cause, because merchants possessed education, experience, energy, and constant intercourse with England, that put it in their power to take care of their interests. They, however, may have suffered from the unproductive state of agriculture, but only in this respect. The agricultural class on the contrary, were not sufficently educated, were deficent in capital, and agricultural skill, and no effectual measures were ever adopted to supply these deficencies, and we believe we are correct in saying, that had there been a better understanding between our leading men, and legislators, we should not now have this evil to deplore. For the good of Canada, we hope that we shall no longer have to complain of this state of things. We do not now, or at any former period suggest measures of doubtful or party policy for consideration, or adoption. The question is simply this—are the rural population of Eastern Canada dependant altogether upon the produce of their lands for subsistence—is this produce deficent in quantity, and not of the best quality, in consequence of the want of agricultural skill in the farmers—and is there a possibility of supplying this deficiency, and curing the evil, by importing instruction and encouragement in the art of agriculture? Without hesitation we answer all these queries in the affirmative—and when this is the true state of matters, can a doubt exist, that there is an obligation rests upon those who have the power, to supply a remedy. It may be replied to us, that Canadian farmers are contented and happy—and we deny it not—but as it cannot be from the abundance they possess of what educated men set a high value upon, and think necessary, not only to happiness, but to their very existence, how can we say that the poorest Canadian farmer in the country would not know how to estimate enlarged means of comfort and convenience, and be happy in the possession of them, as well as those who now have these things. It is easy to say men do not feel the want of comforts and conveniencies they never possessed. For the advancement of industry, and the most healthy state of general prosperity, nothing will have a more powerful influence than a general desire to possess a reasonable amount of the comforts and conveniencies of life. While men are only anxious to provide what is necessary to support the existance of themselves and families, we shall only have poverty and misery, and cannot have the slightest hope, either of active industry, improvement, or general prosperity. To encourage a higher standard of comfort and convenience among a people without going into any extravagance, we conceive, would be a most certain means of promoting industry and improvement, in this or any other country. Contentment may be a virtue in poverty, and distress, but not until we are satisfied of having done all in our power by industry and skill to improve our condition. To be content with the produce of a farm that would be worth only fifty pounds annually, when by the application of skill and industry, it could be made worth one or two hundred pounds annually would be nothing else than folly, and pusillanimity. T . . .

content with poverty, when we might better our condition, would be unworthy of us as intellectual beings, endowed with a desire for comfortable enjoymen ts It is a great advantage to a new country such as this, that has an immense extent of good land, and is deficient in capital and population, to be connected with a rich, and densely populated conntry, such as England, who can supply us with capital, and population. This connection offers us the further advantage of the best market on earth for our spare produce. We do not say that the connection of a poor country with a rich one, is invariably advantageous, but in our particular case, it is undoubtedly so, if we make a proper use of the connection. If we raise here a produce we can export, and receive in exchange British manufactures, and other merchendize that we may require, we have an opportunity of becoming rich and prosperous above most countries we know any thing of. Of course the benefit of the connection will depend upon the judicious use we make of it.

THE PRESENT STATE OF THE AMERICAN PROVISION TRADE.

LIVERPOOL, October, 1844.

In the present interval between the close of one season, and the spring of another, suitable opportunity is afforded for making some observations on the position and prospects of the provision and general produce trade, now fast rising into importance, between America and this country, and for recommending some alteration in the mode of preparing and shipping provisions for the English market, suggested by the experience of past years.

From the annexed statement of the import of the four leading articles to the Liverpool market during the past season, as compared with the preceding ones, it will be seen that the trade is fast extending, and giving a sure evidence of the magnitude *which it is certain soon to reach*; no right estimate can, however, yet be formed on the subject, many circumstances having operated against the trade so far, which will no longer interfere. The strong prejudice which, to some extent, existed at first against American provisions, and for which there was good reason, in the very inferior quality of the earliest arrivals, has been gradually removed, as shippers have learned to conform their brands to the wants of the English market, and as the confidence of buyers has in consequence been gained. In the first shipments a great error was committed in the selection of the articles, price being more considered than quality; whereas, in consequence of their having to compete with the finest and most established brands of Irish, superior quality was required, in order to procure a sale for them: hence arose the heavy losses sustained at the opening of the trade, and also during the past season, where the same error was committed. It should be borne in mind by all shippers, that the finest qualities of all articles subject to a fixed duty, not *ad valorem* (and especially if the duty payable be a high one,) will generally prove the most profitable shipments, inasmuch as all qualities being subject to not only the same duty, but the same charges also, the difference in cost which would appear considerable at the low rates of the home market, would hardly be applicable at the much enhanced value in the foreign market.

BEEF.—No article of American produce has had more difficulty in securing a footing in our market than beef, and none has more successfully established itself in the confidence of buyers. The hindrance to its introduction arose principally from the prejudice which the inferior character of the first shipments naturally produced, and which required some time to dissipate, and the marked change which has taken place in the prospects of the trade has been owing to the improved quality of successive arrivals, and the resolute perseverance of shippers in keeping our markets liberally supplied, in the face of dull advices, and still more discouraging sales. The low ranges of price which have been current during the past season (say from 45s. to 68s. per tierce) though productive in many instances of loss to the exporters, have yet advantaged the trade, by greatly extending the sale of the article, an evidence of which is seen in the comparative imports of the last three seasons, to which we have already referred; and as the recent imports have proved the capability of the United States to give us the *whole* of our supplies, of approved quality, and at prices with which other countries cannot compete, the prospect of a satisfactory and paying trade in beef is favourable, provided the supplies are in some measure adjusted to the demand of our markets. The decrease in the supplies from Ireland is shown in the annexed return of imports to London and Liverpool, and still less may be expected this season; for, though the quantity required for the service of our navy (and which Ireland exclusively supplies) is only 3000 tierces, yet so long as the manufacturing and trading interests of the country remain in so prosperous a state as they are at present, there will be an ample home demand at more remunerative prices, for all the beef that Ireland can supply. The course of prices for the season is generally indicated by the rate at which the government contract is taken, and which has just been concluded for 3000 tierces at 104s. per tierce (of 336 lbs.) against 600 at 78s. in 1843, and 16,000 at 118s. 6d. in 1842.

As the *American curers* will, therefore, have the almost *exclusive supplying of the English markets in their own hands*, they should avoid the faults in cutting and packing, which still attach even to their best brands, and thus exclude competition, not only by lowness of price, but also by perfection of quality. Several of the best parcels that arrived during the past year were very dark in colour, which arose either from the use of a bad quality of salt, or from the imperfect seasoning of the casks, the strong pickle having drawn out the juice of the timber. The latter appears the more probable cause, and which may be avoided in future, by having the oak from which the casks are made more thoroughly seasoned, or by the use of other wood for the purpose; the casks also have generally been too large, allowing the meat to roll about; they should be made of such a size as just to receive the required quantity with tight packing, leaving room for a good heaving of salt; the meat too has often been most irregularly messed, the pieces being of very unequal sizes, whereas each piece should be as nearly as possible 8 lbs., and should be cut square and compact. These details may appear to some persons matters of small moment, still an attention to them will be found to contribute materially to the successful introduction of American beef into the English market.

PORK has had less difficulty in finding a market with us; and less care and attention have, in consequence, been given by curers in adapting their shipments to our market. The position of the trade is, therefore, much the same as it has been for two years past; but it is capable of great extension, and which is sure to take place if an equal facility is shown in

preparing an article suited to the Englsh market, as has been done in respect to beef. The price of pork has been advancing in Ireland for some time past, with the prospect of continued high rates during the coming season, as the number of hogs fed there this year will fall considerably under the usual quantity, in consequence of the partial failure of the potato crop. The Government contract ror 14,000 casks has been taken at 112s. per tierce of 336lbs., against 600 at 76s., in 1843, and 14,000 at 115s., in 1842. A high range of prices for Irish pork is, consequently, expected; which will leave a fair opening for American, with the prospect of paying rates for suitable qualities. Referring to our circular of 1st September, 1842, for a full detail of the Irish mode of curing and packing, we would here only repeat that the brand of "Prime Mess Pork" should consist of 50 pieces of 4lbs. each, from hogs weighing from 160 to 200lbs., every part being packed except the head and legs. It is most important, too, that the meat be firm and well fed, and free from the oily character which American pork generally possesses. The extreme softness of the fat no doubt arises principally from the nature of the feeding in the western country, but is also in part owing to the practice, which we believe generally prevails in America, of cutting up the meat and putting it in salt immediately on being killed; whereas it should be allowed to remain at least 36 hours, in order that it may become quite cold and firm, and thus better prepared for the action of the curing process. The remarks made as to the size of the casks for beef apply equally to those for pork.

Hams—with the exception of a few parcels of very superior cure, for which a high price has been obtained, we have not had a satisfadtory sale; and, as there is no probability of their ever coming extensively into use for home consumption under the present high duty, a limited quantity only will be wanted for export in bond.

Lard.—Of the various articles of modern import from the United States, lard took the lead from the first, and has continued to maintain its position as the item of most extensive import. It is bought most largely by shopkeepers, to retail for culinary uses; by chandlers; and by oil and soap manufacturers. For the first, the finest quality only is wanted, firm and of good colour, and as free as possible from the oily flavour which attaches, more or less, to all American lard. It should be put up in neat kegs, no variation of quality being allowed in the same parcel. For the other purposes, barrels are the preferable package, chandlers requiring strength of qualities and firmness of texture; while all descriptions, down to the most inferior grease, are suitable for the oil and soap manufacturers.

Cheese.—The import of this article to Liverpool during the past twelve months was somewhat over 1,400 tons; while the steady and progressive increase in the trade gives promise of a much extended import in coming years. The general quality of American cheese shows that the soil of the United States is well suited for its production, and which makes it the more to be regretted that the very obvious *defects of make*, which have so long operated against its more extensive introduction into England, should not be remedied. This might easily be accomplished by the circulation of proper instructions on the subject among the farmers in the cheese-making districts *in America*. Of these defects, the principal arise from a too hurried manufacture, and insufficient pressing, which, by leaving the whey in the cheese, not only injures the flavour, but renders it more liable to decay, while the same cause makes it open and porous, a fault particularly objectionable. The make of English cheese has never been equal to the demand of this country; and the home supplies have, consequently, been supplemented by large yearly imports of Dutch. There is now, however, every prospect of the required supplies being drawn largely, if not principally, from the United States instead of Holland; the diminishing import from the one, and the rapidly increasing import from the other, already indicating such a change. As regards the form of the cheese, it is desirable that they be made of less breadth and greater depth or thickness, which would both conform them nearly to the appearance of Cheshire, with which they have to compete, and would also fit them better for passing through the ordeal of a long sea voyage. These hints come too late to affect this season's make; but they may be availed of in leading shippers to make their selections for the English market with more judgment than has yet been shown. Of the various modes of packing cheese in casks, we incline to recommend that of separating them by thin boards, which should be greased, in order to prevent them from adhering to the cheese when much heated and soft. The remarks already made on the preference which should be given to the finest qualities of articles generally for shipment, are peculiarly applicable to cheese.

Butter and Bacon, from the United States, are subject to such high duties as will generally be prohibitory, but they may come largely from Canada—the small duties imposed on Colonial produce being no serious obstacle. The production of butter in Canada is the more likely to be stimulated, in consequence of its being now seen that the country is almost quite excluded from participating in the trade of supplying England with beef and pork—not being able to compete with the United States in a trade which, so far as the demand for these articles for export and ship's stores is concerned, is virtually free.

Tallow seems likely to rank for the future among the staple imports from the United States to this country, and deserves the attention of shippers. The better qualities of American that have been imported so far, have given much satisfaction to the consumers, and are now generally sought after, at 6d. to 1s. per cwt. below the price of Russian yellow candle. The qualities required in tallow, in order to reach our highest market rates, are—a bright pale or primrose colour—a strong dry body, free from any admixture of lard or grease, and uniformity both in quality and package. These are essential points to be attended to; and we would further recommend to large operators, to adopt some distinctive brand for their best quality, the character of which, when once established, would secure for it a ready and satisfactory sale. At present there is no American on market, and the stocks of Russian in Britiain to the present time being 16,000 casks less than at the corresponding period of last year; and as the shipments from Russia now on the way will cost fully 48 s.duty paid here, no reduction from present rates is likely to take place.

Lard Oil.—The duty of 20 per cent *ad valorem*, imposed on this and other manufactured articles, will always prevent any extensive import of such, so long as they can be equally manufactured in this country. Candles will have a sale to a small extent, in bond, for export.

Hides, Horns, Ashes, Bees Wax, Whalebone, Sperm Oil, and some other articles, are likely to become of increasing importance, as items of import from the United States, but the trade in them possesses no feature that demands notice, the amount of which will be determined wholly by the relative rates of the two markets.

Flax Seed and Clover Seed.—The quality of Am-

erican seed has been deteriorating for some time past, and is fast losing the confidence of the agriculturists in consequence. The farmers too of late years are more particular in their selections, and unless, therefore more care is bestowed in having American seed pure and unmixed, the demand for it for sowing will cease. In the early part of the summer, the long continued dry weather seemed quite against the prospect of any important quantity of clover seed being saved, and, in consequence, several speculative purchases were made from the stock that remained over unsold from last season. The favourable change that took place, however, in the after part of the summer, so altered the prospects of the home growth that prices have since continued to recede, with the prospect of low rates for the coming season, and very limited imports being required.

Hemp has been receiving a good deal of attention of late, and has come forward in sufficient quantity to have its value ascertained and its quality tested. It is found to possess great strength of fibre, and in all other respects to have good natural quality; but most parcels of pew-rotted that have arrived, have been so dark in colour, and so imperfectly cleaned, that its sale in consequence has been much hindered; £24 per ton has been the extreme rate obtainable, while the value of Russian was £27 to £28; the imperfect cleaning, and dark colour of the American, alone preventing it from reaching the same price.

Wheat, Flour, &c.—The result of the harvest being now pretty well ascertained, we are enabled to say with confidence that, with regard to wheat—the great staple crop of England—there has never been a more abundant harvest reaped, while the excellence of the quality is quite equal to the abundance of the yield. Oats rank next as to yield, but are below an average. Barley and beans, in consequence of the long continued drought in the early part of the summer, are a very short crop, which in many parts of the country was a complete failure. The *abundance* of the wheat crop will, however, compensate for the deficiency in the others, and low rates, for that article at least, may be looked for. The reduction in price which has already taken place has advanced the duty to the highest point, 20s. per quarter, and at which it is likely to remain during the winter, so that the stock of United States flour held in this country, and which in Liverpool alone amounts to 140,000 barrels, must remain in bond till next summer at least, with the exception of whatever portion may be required for export. The result so far of this season's importation from Canada, shows that the object contemplated by Peel's corn bill of last year has been fully secured, *in drawing to the river St. Lawrence a considerable portion of the produce of the Wese tern States of America.* A late return shows, that the exports from Canada, up to August this season, were, 307,000 barrels flour, 237,000 bushels wheat—the exports to the same period of last season having been only 50,000 barrels flour, and 15000 bushels wheat!! In the operation of this law therefore ample compensation is made to Canada for the loss of the trade with Great Britain and her colonies, in provisions; but at the same time no long tenure of any such protective system need be calculated on, as the PRESENT tendency of British Legislation *is evidently to abandon protection*, and of which the Canadian Corn Act is considered, at least by the agricultural interest, a very *significant evidence.* Referring to the subjoined statements in illustration of our remarks, we are, your obedients,

J. & C. Kirkpatric.

THE POULTRY YARD.

The whole arrangement for the support of a moderate stock is very simple. The yard should, if possible have an open exposure to the south, and be perfectly dry, as nothing is more injurious to all other than aquatic birds than stagnant water or moisture of any sort; and poultry suffer more from a wet winter, even if mild, than from one that is intensely cold, provided it be clear and dry. If the ground is wet, the foundation should be thoroughly drained, and the surface hardened, to render it sound, with a stratum of well-rammed bricklayer's rubbish, or broken limestone mixed with small sandy gravel, over which pounded oyster-shells and egg-shells, or bones coarsely powdered, should be spread; but never paved with either flags or pantiles, as that would prevent the fowls from scratching the ground and picking up those calcareous matters, such as shells, pebbles, and bones, which—as will be hereafter explained—are necessary to their health and formation of their eggs. It should likewise be sloped to carry off the rain; and it should contain an open covered shed for occasional shelter to the fowls, which, extraordinary as it may appear, seldom seek their night abode during the day, except for the purpose of laying. If the shed covers the litter removed from the horse-stable, it will also be desirable; as the warmth which their crouching in it imparts to them is not only agreeable but healthful, and they likewise thus pick up many grains of corn which would otherwise be lost.—*Farming for ladies*,

NORTON FARMERS' CLUB.—LECTURE ON AGRICULTURAL CHEMISTRY.

On Monday evening week the adjourned monthly meeting of the above club was held at the Bagshawe Arms. W. J. Bagshawe, Esq. presided. A good deal of interest prevailed, owing to an arrangement having been made for the delivery of a lecture on agricultural chemistry, by Mr. Haywood, lecturer on chemistry at the Sheffield Medical School.

Mr Haywood pointed out the importance of a knowledge of chemistry to the successful practice of agriculture; and called the attention of the members to those elementary constituents of soils on which the growth and development of plants and animals is mainly dependant. Mr. H. pointed out the absurdity of using oil as a manure, which consisted of carbon simply, with the elements of water. Supposing it to consist entirely of carbon, one gallon would not contain so much as a score of turnips, and consequently could not possibly form them. On the contrary, the quantity of carbon given off by the breathing of five men would supply an acre; and all Sheffield, about 20,000 acres. Guano, which must be considered the most important manure we posess, from its containing all the elementary constituents of plants in a most concentrated state, and in the best form for assimilation, contains a large quantity of nitrogen. Its value had often been estimated by the quantity of ammonia it contained; but this was quite fallacious. The smaller the quantity of free salts of ammonia, and the larger the quantity of unformed ammonia, the better; for the more it will yield in the soil. Its value, however, depends more on the quantity of phosphates it contains than on nitrogen in either form. Too little value had generally been put upon African guano, in consequence of its containing the salts of ammonia in a free state, and altogether containing less nitrogen than the Peruvian; but, as the phosphates increases, the nitrogen diminishes, it is possible that the African will in prac-

tice be found the best. English guano, of which there is a great variety, is generally made from night soil, dried by means of gypsum or lime; but as these seldom contain more than one-fourth the quantity of the elementary constituents of crops possessed by the real guano, its value must, of course, be estimated in the same proportion. He then called their attention to that most important of all the constituents of plants, the phosphates. These were assimilated by plants for the purpose of supplying bones to animals. Phosphates were also contained in the blood, muscle, and brain of animals; and brain of animals; and, consequently, formed an important part of their food. Wheat, peas, beans, hay, and all crops on which animals can live, contain them in large quantity; and, as they extract from the soil, an addition of them as manure is absolutely necessary. Were we to preserve all the excretions of men and animals, we should also preserve all the phosphates consumed by them during their lives, except that portion they carry with them to their graves, which is very small compared with the whole quantity taken during their lives. If this quantity was again added to the soil, it would not be impoverished in a series of ages This, however, is not the case; for all these valuable materials are suffered to run to waste from all the large towns in England. This is found to have exhausted so much from most of our soils, that nutritive food could no longer be produced. This was particularly the case on grass land, where the whole of the phosphates have been carried into large towns, in milk, cheese, and cattle. Bones were found to be a remedy for this evil; but it can only be a very partial one, for I find that every man will take and give off in one year about as muchphosphate as will be equivalent to about 60 lbs. of bones. London alone wastes more than the usual importation of bones can supply The preservation of phosphates, then, becomes of national importance; for if this immense waste is suffered to go on, a great part of the land in England must, sooner or later, go out of cultivation. He concluded by explaining the phenomena of *mildew* and *honeydew*. The former he stated to be caused by the rapid evaporation of water from the leaves of plants after a wet spring, when the salts, the water contained were left on the surface of such plants as were alrerdy nearly matured, while others which were in a growing state appropriated them to their uses; hence this effect on late Swedes, and not on early ones. Honey-dew was caused by an excess of carbon in the plant, which could only occur in dry weather, when the other ingredients could not be furnished for it to combine with. A discussion ensued on the subject, in which the talented lecturer explained several matters required by his audience in a clear and lucid manner.

LECTURES TO FARMERS ON AGRICULTURAL CHEMISTRY.

By Alexander Petzholdt.

London: Taylor and Walton, 1844.

This most useful and interesting work has just appeared; we regret we have not space to give a fuller notice of it, or make an extract of some of the interesting matter it contains. We cannot but agree with the talented author in saying—"To do as their fathers have done, especially when they can refer to predecessors sucessful in the pursuit of fortune, is deemed to be an unquestionable proof of wisdom. But this is a great error. As time advances, circumstances change; and as every other interest around him improves, the farmer must arouse himself to find better means of cultivating his land, and surer methods of obtaining good crops than were known to his forefathers. He will have the foreign corn grower to contend with, and where can he look for asistance except to the discoveries of science? What better method of travelling could at one time have been dreamed of than the mail coach? Yet science has established railways. What success more brilliant could be expected than was achieved by the British navy during the last war? Yet it has been decided that a knowledge of abstract science is indispensable to the future protection of the country. In like manner the next generation of farmers, if the soil is to be cultivated with success, must be acquainted with the natural sciences, with botany, geology, and, above all, with chemistry. When the scientific principles upon which the art of agriculture depends shall be fully known, and the practice founded on it generally followed, the amount of our present crops will be as much a subject of tradition as the pace of the old stage coach, which dawdled away twelve hours in accomplishing a journey of seventy miles. But is it wise, it may be asked, to postpone the benefits of science to the next generation? Would it not be well to seize at once on every assistance offered for the advancement of this supremely important art? Doubtless it would; and if but a few persons, after they have *arrived at manhood, can become qualified to be* discoverers in the science, no man need refuse to benefit by the discoveries of others. In order to do this, a certain amount of information on scientific subjects is indespensable The farmer must know something of the composition of the various plants he cultivates, and of the manures which he carries on his lands, before he can derive any advantage from the statements made of the benefit of this or that substance to various crops. A very little such knowledge, provided it be really scientific, will enable him to escape being misled by interested persons, or from purchasing materials as manures which are either useless in themselves or are sold at ten times their real value."

We consider this an excellent book for the uninitiated in agricultural chemistry.

IMMORTALITY OF THE SOUL.

Professor Wilson, in one of his charming papers in Blackwood's Magazine, adverts to the sublime subject of the soul's immortality in the following beautiful and convincing language:—

"It is melancholy to think that even in our own day a philosopher, and one of high name too, should have spoken slightingly of the universal desire of immortality, as no argument at all in proof of it, because rising inevtiably from the regret with which all men must regard the relinquishment of this life. By the speaking of the desire as a delusion necessarily accompanying the constitution of mind which it has pleased the Deity to bestow on us, such reasoners but darken the mystery both of man and of Providence. But this desire of immortality is not of the kind they say it is, nor does it partake, in any degree, of the character of a blind and weak feeling of regret at merely leaving this present life. "I would not live alway," is a feeling which all men understand—but who can endure the momentary thought of annihilation? Thousands, and tens of thousands—awful a thing as it is to die—are willing to do so—passing through nature to eternity" —nay when the last hour comes, death always finds his victim ready, if not resigned. To leave earth and all the light both of the sun and of the soul, is a sad thought to us all—transient as are human smiles, we cannot bear to see them no more—and there is a beauty that binds us to life in the tears of tenderness that

the dying man sees gushing for his sake. But, between that regret for departing loves and affections, and all the gorgeous or beautiful shows of this earth—between that love and the dread of annihilation there is no connection. The soul can bear to part with all it loves—the soft voice—the kindling smile—the startling tear—and the profound sighs of all by whom it is beloved—but it cannot bear to part with its existence. It cannot even believe the possibility of even that which it may yet darkly dread. Its love—its passions—its joys—its agonies are not itself. They may perish but it is imperishable. Strip it of all it has seen, touched, enjoyed, or suffered—still it seems to survive—bury all it knew, or could know in the grave—but itself cannot be trodden down into the corruption. It sees nothing like itself in what perishes, except in dim analogies that vanish before its last profound self-meditation—and, though it parts with its mortal weeds at last, as with a garment, the life of the soul is felt at last to be something not even in contrast with the death of the body, but to flow like a flood, that, we believe, continues still to flow after it has entered into the unseen solitude of some boundless desert.

If intellect be indeed, doomed utterly to perish, why may we not ask God, in that deep despair which, in that case, must inevtiably flow from the consciousness of those powers with which he has ot once blessed us and cursed us—why that intellect, whose final doom is death, and that final doom within a moment, finds no thought that can satisfy it but that of Life, and no idea in which its flight can be lost but that of Eternity? If this earth were at once the earth's cradle and her tomb, why should that cradle have been hung amidst the stars, and that tomb illumined by their eternal light? If, indeed, a child of the clay, was not this earth, with all its plains, forests, mountains, and seas, capacious enough for the dreams of that creature whose course was finally to be extinguished in the darkness of its bosom? What had the soul to do with planets, and suns and spheres, and all the dread magnificence of heaven? Was the soul framed merely that it might for a few years rejoice in the beauty of the stars, as in that of the flowers beneath our feet? And ought we to be grateful for those transitory glimpses of the heavens, as for the feeding splendour of the earth? But the heavens are not an idle show hung out for the gaze of that idle dreamer, man. They are the work of the Eternal God, and he has given us power within to read and to understand his glory. It is not our eyes only that are dazzled by the face of heaven—our souls can comprehend the laws by which that face is overspread by its celestial smiles. The dwelling-place of our spirits is already in the heavens. Well are we entitled to give names unto the stars, for we know the moment of their rising and their setting, and can be with them at every part of their shining journey through the boundless ether. While generations of men have lived died, and are buried, the astronomer thinks of the golden orb that shone centuries ago within the vision of man, and lifts up his eye, undoubting, at the very moment when it again comes glorious on its predicted return. Were the Eternal Being to slacken the course of a planet, or increase even the distance of the fixed stars, the decree would be soon known on earth. Our ignorance is great because so is our knowledge! for it is from the mightiness and vastness of what we do know that we imagine the illimitable unknown creation. And to whom has God made these revelations? To a worm that next moment is to be in darkness? To a piece of earth momentarily raised into breathing existence? To a soul perishable as the telescope through which it looks into the gates of heaven.

'Oh star-eyed science, hast thou wandered there
To waft us home—the message of despair?'

No; there is no despair in the gracious light of heaven. As we travel through those orbs, we feel indeed that we have no power, but we feel that we have mighty knowledge. We can create nothing, but we can dimly understand all. It belongs to God only to *create*, but it is given to man to know—and that knowledge is itself an assurance of immortality."

The future prices of Colonial wool must be governed in a great measure by the success of a new and very important branch of trade which has recently sprung up in Australia, that of reducing sheep by boiling, for the sale of the tallow they yield. Had it not been for this, stock would unquestionably have gone lower, and wool might have ranged cheaper; but then the question arises how far mere grazing pursuits would have continued to attract the attention of men of enterprise and capital in our southern possessions, for sheep have already been ruinously low, compared with former periods, and agricultural pursuits would soon have been at a premium compared with mere pastoral occupations, which the injurious squatting regulations even now are rendering more than ever uninviting. Two establishments in Port Philip alone have conveniences for producing a ton of tallow each per diem; whereas we well remember, upon the fact of sheep being boiled down at all being mentioned a twelvemonth since, an old gentleman of our acquaintance lifted up his eyes in half-wondering incredulity, and requested us to furnish him with some evidence of a fact so startling, which eventually we did. When we observe that sheep have been sold as low as 2s. 6d. each, our readers will readily comprehend how it is that a profit can be gained from melting down, and we subjoin a Port Philip account current, transmitted to us from Melbourne by a vessel recently arrived:—

HENRY ANDERSON, ESQ. in account with WILLIS AND LLOYD.

Dr.		Cr.	
To reducing 303 sheep, including casks, cooperage, and cartage to wharf, at 1s. 5d.	£21 9 3	By sale of 303 skins, at 5d	£6 6 3
		By sale of 606 legs at 6d.	15 3 0
	£21 9 3		£21 9 3

Average weight of the above sheep, 65 lb.

Caul and kidney fat, nett weight,	3,250 lb.
Carcass fatt, nett weight,	5,065 "
Total,	8,315 lb

Showing an averge weight of 27½ lb5, say at three pence, equal 6s 10½ per head.

(Signed),

WILLIS & LLOYD.

"Mr. Lloyd, of the Breakwater Steam Melting establisment, writes us that he can melt 500 sheep per diem, and states:—

"We have given the result of tallow that may be calculated on from sheep stock. our most anxious study: and have arrived at the following conclusions, which we are certain will be found correct. First, that a sheep of the ordinary Merino breed, weighing 55lbs is just in nice condition for the butcher's shambles, and will produce at the melting establishment 20lbs., of tallow, and for every pound the animal weighs over 55lbs., four fifths will be tallow. Second, young sheep say two-tcothed and upwards of same weight."

Statement of the relative quantities of Tallow obtained from six flocks of sheep, of different average weights.

A flock averaging 44lbs, produced 15½ tallow at 2s. per cwt., and netted 3*s* 2*d* each sheep.

A flock averaging 47lbs, produced 16¾ lbs tallow at 26*s* per cwt., and netted 3*s* 2*d* each sheep.

A flock averaging 48lbs. produced 16lbs tallow at 28*s* per cwt., and netted 3*s* 3*d* each sheep.

A flock overaging 51lbs. produced 19 lbs. tallow at 28*s*. per cwt., and netted 4*s*. each sheep.

A flock averaging 54lbs. produced 20¼lbs. tallow at 28*s*. per cwt., and netted 4*s* 1*d* each sheep.

A flock averaging 65lbs. produced 27lbs. tallow at 28*s*. per cwt., and netted 5*s* 10*d* each sheep

We repeat again that these are facts of the utmost importance to the wool trade, since the staple never can go below the relative value of tallow, and the rapid increase in the flocks of Australia will henceforth be more marketable.

The Canadian Agricultural Journal.

MONTREAL, JANUARY 1, 1845.

Our petition is now before the Government and Legislature for an aid to enable us to continue the publication of this journal in the English and French languages, and to distribute a certain number of copies in French to each parish in Eastern Canada, gratis. We submit this proposition in the hope that if we were able to adopt this plan, it would create some interest in agricultural improvement, that does not exist now. The objection has often been urged that the Canadian farmers are generally uneducated, and would not be able to read a journal. To this we reply, that at present there are few families who have not one amongst them able to read. The journal might also be read at the schools. We promise that no article shall appear in our periodical that would have any the slightest tendency to corrupt youth. We shall always be most careful in our selections; and in proof of this, we would refer to the journal for the past year. We meddle not with political parties or their politics. We shall always recommend respect to the Governmenl, obedience to the laws, and endeavour to show the advantages of British connexion. Our object is the promotion of improvement in Canadian Agriculture, as the best means of augmenting the comfort and happiness of all classes of this community. We commenced thepublication last year principally from a desire to interest the farmers of French origin, by sending them a journal in their own language, solely devoted to agriculture. We are, at all events, the first who have done this, whether we produce any good or not. His Excellency the Governor General was graciously pleased to approve and encourage us in this undertaking, and gave us a sum of money to assist in paying for the translation; and we now have pleasure in saying that of the many Governors we have seen in Canada for the last twenty-seven years, the present is the first and only one who encouraged and assisted us in our humble efforts to advance agricultural improvement. We do not pretend to instruct farmers who are better qualified than ourselves. It is only those who feel they may learn something advantageous, that we write for. We have all the new publications we can procure, to select from, and it is scarcely possible but we shall be able to give some interesting matter to subscribers who are not too far advanced in knowledge to learn any more. For our own part, we have read much, we continue to read, and the more we do read, only teaches us how ignorant we are, and how much we have to learn. We also know, that though the art of agriculture has been practiced for some thousands years, experiments and science will be every year discovering some new and beneficial improvements. Suppose the fact be admitted that there are many farmers in Canada from the old country, who require no instruction, and who are perfectly masters of the art of agriculture, this will not instruct others who are not so fortunate, and who never had the advantage of practical experience in the British Isles. These farmers may not require any instruction for themselves, but neither will they take the trouble to instruct others who do. It is therefore clear that however well qualified some farmers may be, it never will produce the general improvement that is necessary in our agriculture, unless there is some other mode adopted to instruct and interest. The columns of our journal have been constantly offered to all who had any desire to communicate information or instruction to farmers, and if such a desire existed, it was a favorable opportunity to gratify it and benefit the public. But we regret to say that few communications have come to us. We again refer to our journal for the last year, and we trust that the very best practical farmers will not find much that can be objected to. We might enlarge our journal to four times its present size, and find abundance of matter from exchange agricultural publications to fill it up, but in selecting we are most cautious not to copy any matter that would have a tendency to lead farmers into error, and also exclude from our columns all that is not calculated to instruct or interest our subscribers. We find sufficient useful and interesting matter for without occupying any of our space with what is not so. We wish our journal to contain only what may be read at any future time with profit and satisfaction. We rely upon public opinion for a favourable construction of our motives in advocating the improvement of Canadian agriculture, and our humble efforts to promote the prosperity of farmers.

We have frequently endeavoured to explain the relation which commerce and manufactures have to agriculture, but we fear few will credit us when we say that the permanent prosperity of commerce and manufactures in Canada must depend entirely upon a prosperous and productive agriculture. Agriculture may be neglected and despised, and its interests disregarded, or made secondary to every other interest, but sooner or later the fact will force itself upon the notice of those who now appear not to believe it, that

the improvement and prosperity of agriculture must form the basis of all other prosperity in this Province. It is the only source from which we can obtain the means of supporting commerce and manufactures. We profess to be as much the friend of commerce and manufactures as of agriculture, but as we cannot see any possible means for successful commerce and manufactures in Canada except what we may derive from the produce of our lands, we wish to see the quantity and value of this produce augmented as much as possible. Let us only increase the quantity and value of our annual productions, and it will be impossible to prevent its having a favourable influence on trade and commerce, and this is the only certain mode of producing a favourable influence. We have advocated the expediency of employing capital in agriculture in preference to any other way, to secure the prosperity of the country, but those who have capital or the command of it, would employ it in any other way rather than in creating a new production from the soil. It is not, and shall not be our fault, if agriculture does not obtain the consideration it deserves, and its importance to this country be fully demonstrated. Our observations may not bring conviction immediately of their reasonableness and truth, but we shall persevere. The profits of the merchant consist in what he is able to obtain for goods over what he pays for them, without in the slightest degree improving those goods or adding to their value or usefulness, except so far as transporting them from one place to another may increase their value by the cost of carriage, but in no other respect, though they should pass through the hands of twenty merchants one after the other. Hence it is that whatever amount of capital may be thus employed, it creates no new produce that was not previously in existence; it adds nothing to the stock of provisions, and does not augment the quantity of articles which men require for their comfort and convenience. Not so with capital employed in agriculture. It creates a new produce, which must not only pay the labourers employed, and the farmer, but will also give the means of paying for merchandize.

Indeed, the whole of the produce of the land goes to pay for merchandize, except what is consumed by the farmer, his family, and labourers, in food, and perhaps a part of their clothing. What he pays the tailor, shoemaker, carpenter, and blacksmith, all finds its way through their hands to the merchant. If agriculturists did not produce more than they consumed there could be no merchants. It is this surplus alone that must give employment and support to commerce. Manufactures, also, would be of no use, and indeed could have no existence, if there was not a surplus agricultural produce to feed the manufacturer, and give an exchangeable value for his manufactures. The merchant carries the goods of the manufacturer to the agriculturist and the produce of agriculture to the manufacturer, but the very existence of both must depend upon the cultivation of the soil, as it is the produce of the soil that must first set in motion and give employment to both. The more improved and productive the agriculture of Canada, therefore, the more active and prosperous will be our trade and commerce. These are facts which appear to be lost sight of by those who ought to understand them perfectly. We can only judge of the estimation in which agriculture is held in Canada, by the regard and attention that is bestowed upon it by the best educated, and certainly if it was considered unnecessary and useless, it could scarcely have less of either. If the country is only valuable as affording a convenient high-way to the United States, and if the trade with those States is capable of supporting our cities and towns, and a flourishing commerce, independent of the agriculture of Canada, then indeed our agriculture may be neglected, and allowed to languish, and our farmers endeavour to exist in the best manner they can, on the produce of their farms, and supply themselves with domestic manufactures, as they can purchase no other. They could not buy or pay for British manufactures or other imported merchandise. Matters must soon come to this, if the encouragement and improvement of agriculture is any longer neglected. Individuals may acquire wealth here by traffic with foreign states, while this country generally may continue poor, but to insure general prosperity to all classes, we must raise a produce here that can directly or indirectly be employed in this foreign trade. It is on their own productions that the agricultural class in Canada must depend for the means of supplying all they may require, and the amount of what they can purchase for their comfort and convenience, will be in exact proportion to the quantity and value of the produce they are able to raise, by their skill and industry, from their farms.

These are facts which those who run may read, and all who desire to see the Canadian community prosperous, contented and happy, will do whatever may be in their power, according to their station and opportunity, to advance the improvement of our agriculture, being the only certain basis upon which general prosperity can be permanently established.

We may be considered tiresome, and as having exhausted our subject long ago, but we shall not be discouraged or diverted from our purpose nevertheless, until some more competent individual shall take up the subject, or until it can be clearly demonstrated that there is a better and a more certain way to secure the prosperity of the Canadian people, than by employing them in agriculture.

We have repeatedly urged the necessity that exists for the establishment by the Legislature of a Board of Agriculture, for the direction and superintendance of such measures as would be best calculated to advance the improvement of our agriculture, and take care of its interests. We will answer for it, that if

judicious measures shall be adopted to forward agricultural improvement, they will prove successful to the full extent that could be reasonably expected. The Canadian farmers of French origin are not more attached to old modes and customs of cultivation, than the farmers of British or American origin, and we are convinced that if judicious means are adopted to instruct and encourage them to introduce improvements, they will do so as readily as farmers of any other country. The experiment was never fairly made, but let it now be made, and the expenses necessary to make it, will be refunded a hundred fold, by the increased production of the country. This augmented production must support and extend commerce, greatly enlarge the consumption of imported commodities, and hence increase the amount of revenue. On the simple principle of advantage and profit we say that money applied in a proper way to produce agricultural improvement would increase the disposable means of inhabitants of the country, of all classes, who are solely dependent upon Canadian resources, and consequently would be sure te augment the revenue. Let us increase the production of the country, and it must attract commerce and trade to it. We cannot have a permanent commerce if we do not produce what will pay for merchandize. We claim attention to the interests of agriculture on the principle of its being advantageous and profitable for all classes of this community, to give it this attention. Agriculture requires no favour that it will not be able to repay a thousand-fold. There are some millions of acres of fine land in Canada East, already cleared, and fit for the most improved system of agriculture, and we have no hesitation in saying these lands might be made to produce double what they do at present, on an average, and perhaps more. Is it not a pity that we should leave any means untried to produce this good? We would be very grateful to England if she were to grant us an annual income of two or three million pounds currency, and yet we have it in our power to increase the value of our annual productions fully this amount and more, and we neglect it. Shall we have any longer to lament such neglect of our true interests?

Count Rumford has observed, that the inhabitants of Great Britain might be well nourished, their appetites satisfied, and the enjoyment they experience in eating increased, with one-third of the food at present consumed, if the science of cooking was better understood. There are many things certainly allowed to go to waste, that might be converted into healthy, savoury sustenance, if it were not from ignorance of the proper mode of preparing them; and there is also much nutritious aliment wasted hy mismanagement. All kinds of food might be prepared in the most advantageous manner, as well by giving them the most palatable taste, as by extracting from them the greatest quantity of nutriment. Families might, by good management, and by varying their aliment, obtain constantly wholesome, savoury, and nutritious food, at an expense that would little exceed the cost of dry bread. Good nutritious soups may be prepared with small quantities of meat, that, if prepared in another form, or ate alone, instead of being found sufficiently nutritious, would prove not only insufficient to maintain the body in robust health, but totally inadequate to appease the craving of hunger; and little relief would be experienced by filling up the crevices of the stomach with raw water. These matters are of considerable consequence to farmers who keep a large number of servants, and board them. Unless there be very good management in such establishments, there will be great waste, or much dissatisfaction on the part of the servants who are boarded.

There are certain rules that should be observed, and cleanliness in every thing is one of the first. If the master does not see that every thing is kept clean, he will be sure to have servants slovenly and careless in every thing. It will be to the advantage of every master never to allow meat to be set before his servants, which, as to its kind, and mode of cooking, was not such as he might himself make a meal upon. Poor, or badly dressed food, is always productive of loss to the provider. A labourer may be called upon, and expected to work cheerfully and well, when he is satisfied with good, well-dressed food; and, without it, however well inclined, no one can or will do a fair day's work. By being fed with wholesome food, man, like every other animal, will be hearty and full of courage, equal to take work in hand and to perform it with spirit. On the other hand, if he has a scarcity of food, or has only food bad in kind, or badly dressed, it cannot be expected that he should possess spirit to undertake labour or strength to carry it out.

For our own part, we would recommend the system of allowing farm labourers a house and garden for their residence, and to provide their own food. But whether a labourer has to provide his own food, or his employer has to provide it for him, before he can do justice to his employer or himself, it is absolutely necessary that his diet should be fully adequate to the maintenance of his strength; and, as his condition in life will depend upon the difference existing between the amount he receives in wages for his labour, and the necessaries of life he has to provide; and as, again, the condition of the farmer will depend upon the produce of the labour of those he employs, over the wages and other expenses, it is clear that the providing and preparing of food is a matter that demands the greatest attention and consideration. It demands attention as forming an important and heavy item in domestic and agricultural economy; and it claims the consideration of every master and parent, as a moral duty that is due from them, by precept and example, to inculcate upon the minds of those dependent upon them, the principles of frugality and economy, as the best means of attaining the domestic comforts to which their hard

labour entitles them, and upon which their own comfort and happiness, and the future prospects of their children and servants, so mainly depends. Children and servants brought up and employed in a well ordered family, are greatly benefited by it in after life.

Mr. Colman, a gentleman sent from the United States to report the state of agriculture in the British Isles, has published a very interesting volume on the subject, and certainly nothing could show more clearly the infinite superiority of English agriculture generally, over the general agriculture of North America, than Mr. Colman's statement. It is a great mistake to suppose that we cannot profitably introduce English modes of cultivation in Canada. We are convinced that the more closely we follow the English practice of cultivation and management of land, the more certain we will be to raise good crops of every description. We may think ourselves very clever, and superior on this continent, but in the many agricultural publications we have an opportunity of seeing constantly, we have no hesitation in saying, the best and most useful articles are copied from English publications. For our own part, we take almost all our selections from agricultural papers of the British Isles, but we trust our subscribers will not think less of our Journal, or of its usefulness on that account. We can from experience, assure them, they can have no better example to follow, than the agricultural system of their brother farmers in Britain. That system, and the implements employed in that country, are incomparably better than any of North American origin or construction, that we have seen. Our subscribers need not apprehend that we shall propose any English system of agriculture to them which they may not practice with safety and profit.

Mr. Colman, in his work, observes:—"Great pains are taken in all cases to save the manure. Nothing is wasted. Brick or stone tanks, well constructed, are sunk near the cow-stables and pig-sties for the reception of all the liquid manure. The contents of these tanks on being full, are pumped into a small cart with a sprinkling box attached to it, like that used for watering streets in cities, and distributed over the crops, always with the greatest advantage, and with effects immediately perceptible." Mr. Colman further states, that he was convinced from all he had seen, that there is no necessity for impoverishing the soil, but that, cultivated under a judicious system, it will keep itself in condition and be ever improving. Mr. Colman speaks in the highest terms of the efforts that are being made to advance the improvement of husbandry in the British Isles, particularly by the Royal English Agricultural Society. This Society have established an agricultural library and museum, the latter for the purpose of exhibiting specimens of agricultural productions, seeds, plants, specimens of wool, mineral and other manures, models and drawings of implements, &c. &c. &c. We have repeatedly urged the expediency of a similar establishment in Montreal, and we now submit it to the consideration of our government and legislature. Mr. Colman mentions favourably the Highland Society of Scotland, and the Royal Irish Agricultural Improvement Society. The latter have instituted a Model Farm at Glasnavin, near Dublin, that is highly spoken of, and at this farm several young men are lodged, receive practical instruction in agriculture, and work a certain number of hours in the day, in the field. Mr. Colman was present at an examination of these young men, and says they acquitted themselves very well, and with credit to the masters and pupils. The average crop of potatoes obtained on this farm was 720 bushels to the Irish acre of 7840 square yards. The superintendent of the farm says the largest crop of potatoes were in a field where the seeds were set at three feet apart each way. Medium sized potatoes, planted whole, are preferred to cut ones. Italian rye-grass is considered the best for feeding, being frequently cut four times in a season, and yielding a good crop at each cutting. Lucerne is also cultivated, and sometimes cut five times in a season. Both these grasses would thrive well in Canada, the latter particularly. The return of oats to the Irish acre is 80 bushels, and the potatoe oats and the hopetowns, are the varieties cultivated. Mr. Colman in mentioning English cattle and sheep, describes them as he has seen them at Smithfield market, and at other fairs and markets in England. He says:—

"Here are cattle and sheep of several distinct breeds, and all of remarkable excellence of their kind; I do not say perfect, for that, in almost all cases, would be assuming too much, but leaving very little to be desired beyond what has been attained. Their condition and form, their symmetry, their fatness, are admirable; and each breed is seen retaining its distinct properties; and what is most remarkable, showing how much can be done by human art and skill, in improving the animal form and condition, and bringing it to a desired model."

It is only necessary to see Mr. Colman's books to be convinced that we cannot have a better example before us as agriculturists, than the system of husbandry in full operation with our brother farmers, and fellow subjects, in the British Isles; and we confess we would feel more pride and satisfaction in recommending this system to our brother farmers in Canada, than any other. We envy not the feelings of those who would patronize and encourage foreign publications, in preference to British or Canadian, and we know those who do. We would solicit support, but only on the equitable principle of rendering value for the support we may be favoured with, and this we engage to do, or return the subscription at the end of the year.

The following extract we give from a speech delivered by Professor Kane, at the annual meeting of the Irish Flax Improvement Society. When shall we see in Canada so much interest taken to forward the science and art of agriculture, as there is now felt in the British Isles? Never certainly until we have a Board of

Agriculture that will act for us, instead of rich landed proprietors who take this duty upon them in the mother country:—

Professor Kane, of Dublin, then rose; he was not, he said, prepared to take an active part in their proceedings, but as his name had been coupled with the remarks of his Lordship he would trouble them with a very few observations. It would be of the greatest importance to agriculture generally, and to those persons who have its direction, were the application of chemistry more generally applied to that science than it had hitherto been. Soil to a field must be looked to as stone or mortar to a house, for the object desired in the application of chemistry was the creation of a strong and healthy plant. Before a raw material be grown, it must be known whether the material of which it is composed be in the soil, for it must be fully understood that whilst soil may be competent to grow one species of vegetable existence it might not, and in many cases was not, capable of growing another. The application of chemistry to the science of agriculture, was not so easy a matter as many individuals were led and would lead others, to suppose or anticipate. In proportion as was its importance so was the difficulty.—(Hear,hear.) So many things concur in the making of a good crop, that it requires not merely a knowledge of routine chemistry, such as falls to the lot of every medical man, but a special attention to it as connected with that science, and that alone, which, unfortunately, had not yet taken place in this country.

The following article is interesting to farmers. The report respecting dry rot in potatoes exactly agrees with our own observations and experience on the same subject. We have seen a report in an American paper, of an experiment made in the United States, of scattering powdered charcoal over the field of potatoes when in full bloom and having prevented the rot in the crop.

East Cumberland Agricultural Society.—At the late annual meeting and show of this Society, Mr. Ellison, one of the judges of stock, gave the result of his experience in using bones and guano, with respect to the turnip crop. He had used four tons of guano this year, African and Peruvian; and from the appearances of the turnip crop, the African had answered as well as the Peruvian, although there was a wonderful difference in their price. He also had some turnips sown with bones, which were likely to yield about 23 per cent. less than those which had been sown with the guano. Now this was singular, after what he had heard a very respectable farmer state, that, on his farm, the only effect on grass was to make it a greener colour; and that, though it made corn greener for a while at first, it had no material effect upon the quantity produced. This soil was on a thin limestone bed; but he had tried it upon peat moss and it acted equally well. With respect to the permanency of its effects, he could not yet ascertain it so well; and it was a known fact that bones were permanent in their effect. Corn from land which had been bone-manured would be stronger than from that produced by farm-yard manure. But, if they might believe a gentleman who had spoken at a meeting of the Royal Agricultural Society, the effect of guano was permanent; and therefore great benefit might be expected from its introduction. He would now say a few words with respect to potatoes. He had an agency in Lancashire in fourteen townships, and had therefore had ample opportunities of observation; and he might say that potatoes there were a very failing crop indeed; and, in his opinion, it could be attributed to nothing but cutting the potatoes before planting them as seed. It was a common saying with many people whose potato crops had failed, that they had been carried off by the dry rot. But it was no such thing (?). He was satisfied that it was an insect which penetrated through the potato when it was cut, and ate up all its juices, so that it was impossible the stem could flourish. He had examined potatoes in this way; and on taking them up, after being a fortnight or three weeks in the ground, the inside of the potato was found like a sponge, and perforated with small holes. He had this year six acres of potatoes, and they were all planted whole. He had also an acre in which the seed was cut, by way of satisfying his neighbours, and enabling them to judge of the difference of produce between the two modes. The six acres were as good as heart could wish for; while the acre in which the seed was cut was not half a crop. There was a tenant whom, three years ago, he threatened to turn off his farm if he continued to cut his potato-seed. He had seen him the other day; and he told him that it would have been 90*l.* in his pocket, if he had followed his advice, as he had lost 30*l.* a year for the old practice. A very effectual mode to prevent the worm amongst potatoes was to wash them. Experiments of this kind had been made; and those potatoes which had been washed, when laid up for seed, were found to be entirely exempt from this disease, which arose from the egg of an insect being deposited in the eye of the potato. By washing the potatoes in the autumn, the ova were of course washed out, and all danger obviated.

Every farmer, as well as others, who have to obtain a livelihood by their exertions in agricultural pursuits, should always keep in mind that "labour is the root of wealth." The great advantage to be derived from adopting a regular system in agriculture is, that each work would be distinct and separate, so that one could not interrupt or interfere with another. By due arrangement, it is evident that labour can be so applied as not to be in the least degree wasted or lost, by *two* or *three* going across each other, to do what ought to be done in its regular time by *one*. Industry, with a proper system, upon a farm of fifty acres, if the land be of moderate quality, will secure for a farmer a livelihood. Every spot ought to be in demand for some crop. The produce of one square yard, if it be worth only one halfpenny will be at the rate of 10*l.* 1*s.* 8*d.* the acre. And if the produce of one square yard amounts to one pound, that will be at the rate of 2 tons, 3 cwt. 24 lbs. the acre. There is scarcely one farmer in five hundred that can estimate the loss sustained from a want of attention, and from carelessness, in trifling matters, especially in what appertains to manure. The dung heap may be often seen placed in such a situation, as if purposely fixed upon, merely for the sake of having all its juices and fertilizing qualities effectually washed away; and the urine and oozings from cattle and horses utterly wasted and lost, by being suffered to run into some brook or river, instead of there being a suitable place constructed to receive every drop of so valuable a manure. A mode-

rate sized full grown beast will, upon an average, void four gallons of urine in the twenty-four hours; which would be at the rate of 1460 gallons, or 5 tons, 4 cwt. in the year. Besides this, the washings, &c. from the house are constantly thrown away into some sink or gutter, instead of being carefully added to the dung heap. That such waste ought to be avoided will appear evident to all who are aware that an adult will void about two quarts of urine every twenty-four hours, or above 13 cwt. a-year. These matters, and the results depending upon them, either for profit or for loss, are deserving of serious attention from every farmer and landed proprietor, and demonstrate the great importance, indeed, the absolute necessity, of constructing all farm buildings, offices, and conveniences, with a view to the comfort and cleanliness of the animals; and, at the same time, with a view to increase the quantity of manure, as well by having proper receptacles for saving all the oozings from them, as by having those receptacles adapted for the conversion into manure of all green weeds, and other kind of refuse that may be thrown into them. There is one thing always to be kept in mind, as being of the utmost consequence with regard to manure, that is, to prevent as far as possible, its being exposed to the effects of rain or water, excepting only the moisture that comes from the cattle or the washings, &c., that may be thrown upon it from the house and out-offices. There is nothing more detrimental to manure, especially animal manure, than for it to be left exposed to the effects of rain and running water. By being kept in a heap, without any moisture but what has proceeded from the cattle, house-washings, &c., as before mentioned, the dung will ferment, and various kinds of salts will be generated: these salts constitute the very essence upon which its fertilizing qualities depend, and are all soluble in water: if, therefore, dung be exposed to its action, all the saline parts which constitute the fertilizing qualities of the manure, will, as is too often the case, have been dissolved and washed away before it shall have been placed as nutriment to feed those plants and vegetables which are to constitute the crops about to be raised from the soil. The soil near the buildings where nitre or saltpetre is manufactured, is a very valuable manure, on account of the salts with which it is impregnated. In Italy, and other places on the continent, the floors and walls of buildings in which horses and cattle are kept, are every year picked by the manufacturers of salt petre, because their surfaces are impregnated with this salt, which is obtained from the pickings by washing them in water which is subsequently evaporated by boiling, until the saline matter deposits itself in the vessels. It will be clear from this that the fertilizing elements of manure may be greatly increased, by taking advantage of a process so plainly pointed out by nature, and guarding against the salts which are soluble, being carried away by rain or other water. Though it be of the utmost importance to have the dung heap secured from the effects of rain and water; yet it should be as much as possible exposed to the action of the atmospheric air, which is the great and active agent in producing and increasing its fertilizing qualities, by generating saline particles.

The strength of manure depends upon the quantity and the quality of the different salts contained in it: but before manure can become available as nutriment for the delicate and tender roots of plants, the salts it contains require to be dissolved and fully diluted with water. For want of solution and proper dilution, land is said, from the effect of manure, to have been burnt, by having had too much, and so rendered for a time unfitted for supporting vegetation, and made incapable of yielding any produce. It requires great care in planning every farm building and office, to guard, as far as possible, against the effects of rain and water upon the dung heaps: landers should be placed under the eaves, as well as every other appropriate means adopted for that purpose: in a word, no exertion should be spared to increase the quantity, and to improve the quality, of manure. It is upon industry, and a due attention to the dung heap, that the prosperity of the farmer mainly depends; with these, if he has health and a sufficient allowance of intelligence to pursue a regular system in their application, his farm of moderately good quality and tolerably well stocked, if he cannot pay his way, make a livelihood, and bring up a family—the blessings of God be upon him—he is not adapted for this world, whatever he may be for the next.

The new manure, Guano, is so much coming into use, that information respecting its application must be useful. The mixing of guano with ashes or gypsum, we do not think a fair experiment, as both these substances are good manure in themselves applied alone, particularly ashes. The following article was sent by a friend, who selected it from a Scotch newspaper:

RULES IN THE APPLICATION AND PREPARING OF GUANO.

1. Procure genuine guano (Peruvian, or Ichaboe, Western Africa) direct from the ship, if possible, and employ a competent person (an agricultural chemist,) to examine and analyze the same before put into bags, previous to leaving the port.

2. If there are any lumps in the guano, pass them through a sieve, and repeat the same until they all disappear. (The mallet will sometimes be necessary, especially in Peruvian samples.) Never mix slacked or unslacked lime with the guano. In case of mixing bones and guano together, for a top dressing, it should be done only two days before applied to the earth. In preparing different soils, &c., place always a layer of the ashes, earth, or otherwise most appropriate for the guano intended to be applied, and one of guano alternately. When done turn the whole carefully over together, and after it is properly mixed with a shovel, pass the same through a garden riddle, and exclude the whole from the atmospheric air, or damp situations, until taken away for use.

3. It is advantageous to be applied before or after

rain. This is to be effected by strictly attending to the weather glass

4. *Preparation for clay and strong soil.*—Mix wood charcoal, or coal-ashes, pass through a sieve (quite cold), peat sod, or turf ashes, if it can be procured, in preference, and sawdust, if the former cannot be readily obtained, the day before taken up for use, with as much farm-yard drainings sprinkled over the whole, and after being regularly mixed together, so that they will pass readily through a garden riddle, preparatory to their immediate application to the earth, and sufficiently dry to be used with the drill, if required.

5. *Preparation for gravel, sand, or any light soils.*—Gypsum, strong clay or marl (not calcined), earth from ditch bottoms, decomposed soils, or good black garden earth, and if not sufficiently dry, may be exposed to the sun, or open air, sufficient time to pass through the finest mesh sieve they will admit of.

6. *The April and May top dressings, for Grazing Land.*—Clay and strong soils, per Statute acre, three cwt. of guano with three times its bulk of—[Rule 4.]

7. *For Meadow Land, Gravel, Sand, or any Light Soils.*—Two cwt. of guano and 2 cwt. of gypsum, or 2 cwt. of guano, and three times its bulk of—[Rule 5.]

Observe, when four cwt. of guano, &c. is applied to the acre, it will be better to divide that quantity and introduce two cwt. of guano, &c. before the land is laid down for meadow, and two cwt. of guano, &c. as early as possibly convenient after the grass or hay is taken from the field. Should, in any instance, a smaller or larger quantity of guano be preferred, as an experiment, in that case quantities of each, proportionately, according to the nature of the soils, and after applied to the ground, in all top dressings to be immediately well rolled and bushed.

8. *Moor, Peaty, Springy, or Mossy Grounds.*—Three cwt. of guano, with three times its bulk of—[Rule 4.]

N.B.—All artificial grasses, clovers, to be applied same as meadow land; nature of the soil to be treated accordingly.

Although the increase of grass will be very considerable indeed, the aftermath and hay taken out of the field, it is not of a coarse quality, neither does it injure the crops for the following year; but it is recommended the spring following, to apply two cwt. of guano, and three cwt. of soil, ashes, or what is properly adapted for the land, in quantity, as it will increase the crop and bring it forward considerably earlier, and the grass and hay will be of a superior quality. But if no additional top dressings are applied in spring, or after the field is cleared of grass or hay for three years, the crops will be stronger than those manured with farm-yard dung, or bones—for manure is the mainspring in all farming and garden operations. We may drain well, subsoil, or plough deep, but without a sufficient quantity of manure, land cannot be more profitably worked than a horse can that is only half fed.

9. *Top dressing for Wheat, Barley, and Oats.*—For April, May, and beginning of June, for all soils deficient in plant, or in a weakly state, the following application will prevent the wire-worm destroying the roots (as all insects, rats and mice also, will not stay where genuine guano is near), and, in a great many instances, has destroyed the wire-worm altogether, and prevented mildew.

10. *For Gravel, Sand, and Light Soils.*—Two cwt. of guano, and two cwt. of gypsum, or two cwt. of guano, with three times the bulk of—[Rule 5.]

For Clay and Strong Land.—Two cwt. of guano, with three times the bulk of—[Rule 4.] The above, if applied to crops of corn, in a healthy state, will give additional increase to the same generally, quality finer, bulk of straw, greater and earlier at maturity, than farm-yard manure, or bones, with less labour, and half the expense.

11. *Potatoes (for Land generally.)*—Three cwt. of guano, with three times its bulk in ashes or earth, with ten tons, or half the usual quantity of farm-yard manure, to be strewed at the bottom of the furrows, by hand, before the sets are planted, and the same will not only increase the crop one-third in quantity, but will be earlier, quality superior, and the disease so prevalent a few years back, will not return.

It must be particularly observed, in drilling guano, or ploughing it in, after sown broad cast, previous to having been turned over, the depth of the furrow should be calculated, according to the nature of the soils. If cold, nearer the surface than gravel, or light soils; and to those agriculturists who have not experienced the increase, by the introduction of guano, it is advisable, to shew the marked alteration, to leave a quarter of an acre of each in its original state, and to notice the difference in produce and quality, also that of farm-yard manure, and bones, if used in the same field, as an experiment.

12. *For Turnips and Mangel Wurzel*—The machines used for drilling the manure and seed at the same time may be adopted, providing five times the mixture with the guano, laid down in the rules of this treatise, be strictly attended to, by which means the guano compost is deposited so much deeper and so much in advance of the seed, as to allow a portion of the soil to intervene between the seed and manure below it. I beg to remark here, for gravel, sand, and all light soils, one cwt. of gypsum with three to four times that of earth or ashes, damped with farm-yard drainings, stagnant water, or thick water from a pond, in such a damp state as will freely pass through the machine or drill, will materially assist in the first stage of vegetation of the turnip, &c,

It is highly important for turnips and rapes not to let the seed come in contact with the guano direct, as it will prevent the seed from germinating.

We observe in a late Belfast newspaper, a report of the proceedings that took place at the annual meeting of the Irish Flax Improvement Society, from which it appears that the efforts of the Society have been productive of immense benefit by the improved system of cultivating flax which they have introduced. This they have been able to accomplish, by sending several young men to Flanders, to learn the Flemish mode of cultivating, and managing Flax. We have done all that was in our power to induce farmers to cultivate flax and hemp in Canada. We published an Essay on the subject of cultivating and managing these plants, for which we were awarded the Silver Medal of the Montreal Natural History Society, but nothing further has been done to encourage the cultivation. We are satisfied that the climate and soil of Canada are most favourable for flax and hemp, and we believe they would be the most profitable crops that could be cultivated. Until, however, the "Factor System" is introduced we need not expect that flax or hemp will be grown here to any great extent. We mean by the "Factor System" the establishment of Machinery where the crop of flax and hemp may be purchased green from the farmer, after it is grown, and stacked in the fields. This subject deserves the consideration of our Legislature, but if any measures are adopted

for the establishment of a General Board of Agriculture that Board may take the management of the subject. We copy a part of the Report submitted to the meeting, which we think may be interesting, and instructive to ourselves. It appears that from 600 to 700 lbs. of flax is the average return to the acre, and the value £45 per ton:—

Management during the past year.—"Early in February, your Committee had the regret to receive the resignation of Captain Skinner, whose able discharge of his duties, as Secretary to this Society, had been fully appreciated by your Commitee, and by the public at large. No time was lost in appointiug a successor; and the choice fell upon Mr. James MacAdam, jun. who has fulfilled the duties of the office. In June, an application was made to your Committee, by Mr. Hardy, one of the Society's agriculturists for a grant of money, to enable him to visit Courtrai, for the purpose of learning the system there pursued of stacking up the flax crop of one season, for treatment in the following spring. As your Committee deemed it advisable that this system should be fully understood, which had not hitherto been the case here, they acceded to Mr. Hardy's request, who visited Courtrai, and has drawn up a report of his observations, which will appear in the printed appendix. The Society's four chief agriculturists have been most actively engaged in giving their practical instructions on the estates of subscribers, in parts of every County in this Province, and in some parts of Leinster. As your Committee were strongly impressedwith the great utilty of these trained instructors, they thought fit, in Spring, to sellect six young men of intelligence and ability, accustomed to the management of flax. These were placed with the chief agriculturists, and accompanied them in their rounds; they are now competent each to take charge of a district, next season. Mr. Lawson, who had formerly been sent to Belgium, by the Society, was also engaged this season; and three trained labourers were placed in different parts of the country, where their services were required. The active superintendence, and the practical instructions of all the Society's staff, have been fully testified to by those with whom they have been located, and a marked improvement in the growth and handling of flax, is manifested every where they have visited.

Saving of Flaxseed.—"In allusion to this most important topic, your Committee have the liveliest feelings of satisfaction, at having been instrumental in bringing prominently before the farmers the great utility of flaxseed, as food for all kinds of live stock. A prejudice had formerly prevailed against saving the seed, from an idea that it would injure the quality of the fibre. This had been heightened by an injudicious manner of rippling, by which the ends of the flax were considerably injured and frayed. Though the printed documents which your Committee issued, and especially, by the practical instructions of the Society's agriculturist, the farmers were taught the proper manner of rippling. Almost every where through the country, this season, a large portion of the crop of seed has been saved, and the flax fibre has not been at all deteriorated, when the operation was performed with care. Your Committee have reason to believe, that fully one-sixth of the flax grown in Ireland, this season, has been rippled. The seed has either been used for feeding, or has been sold for the oil mills; and the total value of the above-named quantity, reckoning it at £3 or £4 per acre, cannot be estimated at less than £60,000 or £80,000. In concluding this part of their subject, your Committee have to record their conviction, from the results of the past season, that, in a few years, *all* the seed of the Irish flax crop will be saved, and an addition thus made to the resources of the country (even supposing flax-culture to remain stationary,) which would amount to nearly half a million per annum.

Machinery.—"Among the most pleasing features, in the progress of improvement, which your Committee have to notice, are the strides towards perfection that have been made, during the past years, in the adaptation of machinery to the breaking and scutching of flax. The prizes offered for machinery, by the Society, last year, gave an impetus to the ingenuity of machinists, which continues still in full force. Your Committee have heard, with pleasure, of new inventions, or improvements on former adaptations, which have been very successful, when practically applied; and the most marked superiority in the manner which flax is at present handled, is the consequence. Several large landed proprietors have, at great cost, erected scutch-mills on their estates, for the benefit of their tenantry, containing the most approved machinery; and they have thus conferred a boon, which does honour to themselves, and is fully appreciated by their tenants Your Committee have every reason to hope, that, in a short time, flax-breaking and scutching machinery will be brought to a high state of perfection, and that the Society will no longer have to lament the inefficiency and waste which characterised the Irish scutch-mills, before the commencement of the Society's labours.

Hand-Scutching.—"While your Committee are satisfied that machinery is more suitable than handwork for the preparation of flax, in the greater part of this province, they have reason to think that hand-scutching will prevail in the poorer and more densely populated agricultural districts, in other parts of Ireland. They have, therefore, established a school for hand-scutching, under Mr. Patterson, one of the Society's agriculturists, who fully understands the Belgium method, where the assistant-agriculturists are being trained, and rendered competent to instruct the people in this process, in those districts of Ireland where they may be in in future located."

The Factor System.—"It has been the desire of your Committee to introduce and foster the trade of purchasing flax on the foot, as they conceive that this would at once obviate the objections to the trouble of managing the crop in districts of Ireland like the adjoining counties, where the agricultural population is fully employed. The gentlemen who engaged in this new branch of business, last year, from taking too much in hands were unable to realize any profit, as much of the flax was greatly injured by their inabilty to have the different processes, on so large a quantity of flax, managed by their infant establishments. This season, however, those who have purchased flax on the foot, have expressed themselves well satisfied with the result of their enterprize; and the claimants for the prizes, which your Committee offered to these gentlemen, can testify that such is the case. Mr. Galbraith's establishment at Lifford, has been of the most essential service, not only in giving profitable employment to numbers of persons in that neighbourhood, but in holding out such an example to the surrounding farmers, in the neatness and care with which the flax is handled, and the consequently vast improvement in the quality of the fibre, when ready for the market. That the system of flax-factorship will ultimately prevail in the North of Ireland, your Committee have every reason to think; and meanwhile, their best thanks are due to the enterprising pioneers, who though without profit

to themselves, in the first instance, have paved the way to the successful prosecution of this branch of trade.

In a late number of the Mark-Lane Express, we have found much interesting agricultural information. From a report made to a Farmers' Club, by a deputation appointed to visit the farm of one of its members, we copy the following:—

Spring Park Farm consists of about 200 acres. The most striking feature observable on entering the land was the care which had been taken, by grubbing hedge rows, &c., to lay the land open to the influence of the sun and air. The soil of this farm consists of black sand and beech gravel, with a subsoil of white sand and gravel. The moor-pan formerly consisted of exceedingly hard conglomerated masses of gravel and apparently feruginous sand, some of which were so large as to require six horses to draw them off the field. They are very similar to what is called pudding stone, and the soil is evidently, from its appearance, a very inferior one, requiring pressure to consolidate it. Previous to Mr. Davis' occupation, a field, termed Starve Acre, from its unproductive quality, would scarcely grow anything; but under his management it has become the best on the farm, and has produced, with thin sowing, no less than five quarters of wheat per acre. The whole of this apparently intractable land has been subsoiled, and a very large portion drained by Mr. Davis; who, though his lease is only five years to run, is now draining a further portion, four feet deep the labour alone costing him 9d. per rod. So convinced is Mr. Davis of the value of draining, that he believes even this expense will be fully repaid to him. His practice is to lay the land in ridges, varying from twelve to twenty-four feet in width. The seed having been got in, he generally runs Smith of Deanston's subsoil plouge down each furrow between the ridges, even through the drained land,

With reference to the system of thin sowing, the deputation had an opportunity of seeing the stubbles that were still remaining unbroken. The next criterion for judging presented to the deputation was Mr. Davis, stack-yard, consisting of five large stacks of wheat, 2 of oats, 2 of buckwheat, one of pulse and 3 of hay. Besides these stacks there was a barn full of pulse, and another of wheat and barley. The appearance of the crops was excellent. The straw was exceedingly strong, and the ear was very fine. The pulse crops were remarkably well podded. The wheat was the Essex rough chaff, which Mr. D. had been told could not be grown on the system of thin sowing, as it had been said that thin sowing produced mildew, a disease to which this sort was particularly liable. Mr. D. states, however, that mildew is a disease that he has scarcely ever been troubled with.

From this Report it appears that draining is one of the most powerful means of improvement in husbandry; and it may be supposed how much it may be required in Canada, when we state that we never had an opportunity of seeing one farm in the country that was throughout sufficiently drained. We are convinced that no improvement is so essentially necessary to good farming as sufficient draining. Indeed labour and manure is in a great measure thrown away when applied to soil that is not drained. We recommend this mode of improvement before all others, wherever it is required. This is the first step to be taken towards a better system.

Liverpool Guano Market.—During the past week several large parcels of Ichaboe, on the spot, are reported to have changed hands at 6*l*. The price has been offered and refused for several cargoes deliverable in January and February next. 100 tons have been taken for export to Hamburgh. A new feature in the market is the receipt of orders from France for the vineyards there, at limits, however, a shade below present prices. On Thursday last the cargo per Sphynx, and the cargo per Tantivy, were both offered at public auction, 5*l*. 15s. being the highest bid for each; both shipments were taken in by the selling brokers at 6*l*. 5s. The cargo by the Aurora is by far the best yet imported from Ichaboe. It very much resembles the Peruvian in colour and dryness, and possesses, according to Mr. Huson's analysis, 78 2-5 per cent. of rich available fertilizing matter. The first contract was effected from the quay on Thursday last at 6*l*. 5s., but the bulk has gone into the bonded warehouse, originally the station ot a customs' locker, who was immediately compelled to quit his quarters, owing to the noxious effluvia threatening his health. It has just come out that several crops manured with guano have been utterly destroyed in Scotland, and, on tracing the affair, the guano turns out to have been sent from here, where the article was artificially manufactured last year to a great extent, from sea sand, the refuse of hide cargoes, and all sorts of rubbish. From this it is evident how essential it is to have it either out of the bonded stores, from the ship's side, or from parties of the first standing, whose character is a guarantee against all frauds.—*Liverpool Times.*

It is said. that if all the vessels that have gone out in search of guano should obtain full cargoes, they will bring home no less than half a million tons of it, or enough on the four course system of husbandary to raise two millions and a half acres of turnips, as many of barley or oats, as many of clover, and as many of wheat—that is altogether ten million acres of produce. —*Cumberland Packet.*

Guano.—The demand, both on the spot and for delivery, is limited. There have been no arrivals since our last, owing to the easterly gales. On Wednesday two small cargoes were offered by auction, for the first lot of which 5*l*. 15s. was bid: it was taken in at 6*l*. There are now sellers at the former price for quantity. By the last accounts there were upwards of 250 vessels at Ichaboe: the arrivals in this country are, on an average, a ship per day. The outports are getting well stocked.—*Liverpool Albion.*

Guano.—Important.—We understand, by warrant from the Right Hon. the Lords Commissioners of Her Majsty's Treasury, dated the 17th ult., guano, imported from Ichaboe, or other places on the west coast of Africa, in British ships, and sold for the first time, is directed to be passed free of the auction duty of one-half per cent., hitherto charged on the sale of that article, and that the Commissioners of Excise have issued directions to their officers accordingly.—*Liverpool Courier.*

A splendid eagle was shot at Manche, in France, on the 15th October last. It had on its neck a gold collar, bearing a Latin inscription in Gothic characters, and the year 1750.

SONG OF THE SOIL.

BY J. H. R BAYLEY.

I start the bulb of the beautiful flower,
And feed the bloom of the wild-wood bower;
I rear the blade of the tender herb,
And the trunk of the stalwart oak I curb;
I force the sap of the mountain pine,
And curl the tendrils of the vine;
I robe the forest and clothe the plain
With the ripest of fruit and the richest of grain.

The cheek of the peasant I flush with health,
And yield the sturdy yeoman wealth.
I give the spirit of commerce wings,
And prop the tottering thrones of kings.
The gorgeons palace and humble cot
Owe every atom to me they've got;
And the prince at his banquet and hind at his board
Alike must depend on the fare I afford.

Man may boast of his creature might—
His talents in peace, and his prowess in fight;
And lord it over beast and bird,
By the charm of his touch, and the spell of his word,
But *I* am the sole and mighty source
Whence flows the tide of his boasted force—
Whatever his right; and whoever he be,
His pomp and dominions must come from *me!*

I am the giver of all that's good,
And have been since the world has stood!
Where there's wealth on the ocean, or beauty on land
But spring from the warmth of my fostering hand?
Or where the object fair and free,
That claims a being but's traced to me?
Cherish! then cherish, ye sons of toil,
The wonderful might of the fruitful soil.

ON THE CULTURE OF LUCERNE.—TO THE EDITOR. SIR,—I think there is not a more profitable grass than the lucerne, having experienced the usefulness of it for eight years, and having had this season three good crops, and the fourth cutting—half a crop. Mine is in rows, eighteen inches apart, kept clean, and manured every other year with good dung from the stock eating hay and corn. One acre of lucerne managed well on good land, is worth more than £20 for the season. If you or any one wishes for information on the subject, I shall feel pleasure to give it.—Yours faithfully, A CAMBRIDGESHIRE FARMER.—*October* 2, 1844. —*Cambridge Independant.*

MONSTER POTATO.—We are in the frequent habit of hearing of "monster meetings," "monster trains," "monster trials," &c.; but last week our optics were astonished at seeing, on entering the Denbigh Arms Hotel, in Lutterworth, a monster of another kind—viz., a monster potato! Its length is 18 inches, its circumference 12, and in appearance it resembles some of the monster effigies that ornament many of our old churches. It was grown in the garden of Mr. Vears and weighs rather more than four pounds.—*Ib.*

In the first place, take care ye never begin to speak till ye have got something to say; and secondly, be sure to leave off as soon as ye have done.—*Witherspoon's Advice to Orators.*

MONTREAL MARKET PRICES.

CORRECTED BY THE CLERK OF THE MARKET.

New Market, January 1.

Wheat,.....per minot,.. ...	... 5/0 @ 5/0
Oats,..... do ...	... 1/3 @ 1/4
Barley,..... do ...	... 2/0 @ 2/6
Peas,..... do ...	... 2/0 @ 2/9
Buckwheat, do ...	... 1/8 @ 2/1
Rye,..... do ...	... 2/6 @ 2/10
Flaxseed,... do ...	... 4/0 @ 5/0
Potatoes, New, do ...	... 1/3 @ 1/6
Beans, American, per bushel,....	... 4/0 @ 4/6
Do. Canada,.... do	... 6/0 @ 6/8
Honey, per lb,..	... 0/5 @ 0/6
Beef,... do	... 0/1½ @ 0/5
Mutton, per qr.	... 1/0 @ 4/0
Lamb,... do	... 1/0 @ 4/0
Veal,..... do	... 2/0 @ 10/
Pork,.....per lb,.... ...	... 0/2 @ 0/4½
Butter, Fresh, do	... 0/9 @ /10
Do. Salt, do	... 0/6 @ 0/6½
Cheese,..... do	... 0/3 @ 0/4
Lard,..... do	... 0/5 @ 0/6
Maple Sugar, do	... 0/4½ @ 0/5½
Eggs, per dozen, fresh, ...	... 0/7½ @ 0/9
Turkeys, (old), per couple, ...	... 4/0 @ 6/3
Do. (young) do ...	... 4/0 @ 6/3
Geese,..... do ...	... 3/0 @ 5/6
Ducks,..... do ...	... 1/8 @ 2/6
Fowls,..... do ...	... 1/0 @ 1/8
Chickens,..... do ...	... 1/0 @ 1/8
Partridges,..... do ...	... 1/8 @ 2/0
Hares,..... do ...	... 0/4 @ 0/6
Apples, American, per barrel,...	... 7/4 @ 10/0
Do. Canada,... do ...	... 10/0 @ 15/0
Flour, per quintal, ...	... 10/6 @ 12/0
Beef, per 100 lbs.,.... ...	... 20/0 @ 22/6
Pork, Fresh, do	... 22/6 @ 25/0
Hay, per 100 bundles,. ...	... 20/0 @ 27/6
Straw, per 1200 lbs.,... ...	... 12/6 @ 17/6
Woodcock, per brace,.. ...	... 0/0 @ 0/0
Peaches, half barrels,.. ...	... 00/0 @ 00/0

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