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The Farm.

THE PRACTICAL QUESTION.

ARTICLE I.

The most advanced States of the American Republic are far behind England in the science and practice of Agriculture, and taking it all in all, the Province of Nova Scotia is far behind the United States. The causes of this condition of things are such as to reflect no blame upon anybody; but it is well to acknowledge it, to keep it before our eyes, and, as regards our own Province, to devise ways and means for obviating it,—for Agriculture is a branch of industry which every statesman in the world, whose opinion is worth anything, acknowledges to form the necessary basis of a country's wealth.

Gentlemen will tell you, in the streets of Halifax, that this is a young country, and that high cultivation is not to be expected, that our farmers as a class, are poor, have not had time yet to surround themselves with the luxuries of rural life and the mechanical refinements of implement makers, that they have so much hard work to do that they have no time to think, and that we must wait till

we are as old as England, and then we shall see what we shall see. Now, there is a great deal too much truth in all this, yet there is misconception upon an essential point. The misfortune of such arguments, and a misfortune under which our farmers are labouring, is that this is not a new, nor a young country, in the agricultural sense of the term. Its time of youth is past; its virgin soil and other advantages of a young country and a new settler are gone by; and the greatest of all misfortunes to many of our farmers is that they continue the methods of makeshift farming when no longer profitable or adapted to the circumstances of themselves or their farms. They farm badly because they are poor, and they remain poor because they farm badly. Let them arouse themselves then, or let others arouse them, to a sense of the true state of affairs. When the tadpole finds the pools beginning to dry up, he forthwith drops his tail and gills, and acquiring legs and lungs, becomes a frog and leaps out of the water, forsaking his former haunts and habits and holding his head erect as one who has risen in the world. So must it be, sooner or later, with every one of those primitive farmers who still adhere to the traditions of the past, who go on clearing land that was cleared and

exhausted fifty years ago, and throwing among the little stumps some 'grass seed,' that they may break their backs trying to mow it, while their long-cleared fields, are becoming tired of bearing even a scanty crop of weeds and brush. How often is it asked, Why do so many of our farmers' boys go away? The wonder should be, in many parts of the country, why any of them at all remain at home. Hard work and hard living, are not tempting to most people under any circumstances, and the grovelling occupations of a miserable starved farm that will not bear crops, and where the implements are rude and want repair, present no inviting aspect to an ambitious young man.

Once and again, when Election time comes round, our politicians swell up these young men with a sense of their importance, and tell them that they are the "bone and sinew" of the country. If they are so, it would be well to keep some of them at home, by giving them work that will be profitable and pleasant to themselves and beneficial to the country. The means within reach for placing our land and our farmers in a more satisfactory condition, will be discussed in succeeding papers. In the meantime we shall be glad to receive communications on the subject from correspondents.

WHEAT FARMING.

The choice of seed is an important point in wheat farming. The best, heaviest and hardest grain should always be selected for this purpose. It is said that old wheat, if kept in the straw unthrashed till wanted, is greatly superior to new seed, the former germinating more speedily than the latter, which will not come away without rain. There is reason to believe, says Sir John Sinclair, that old seed wheat is not so liable to the smut as new seed, and that it produces straw of a stronger quality, and not so apt to lodge, although many intelligent farmers doubt these advantages, and contend that keeping old seed in the straw must occasion a loss of at least 25 per cent. on the quantity kept.

The soil and climate from which the seed-wheat is obtained are likewise matters of solicitude with the farmer. The wheat plant is not a native production with us, but comes from a warmer climate, having a longer and more genial season than Nova Scotia, so that while we give to the cultivated plant a rich soil to prevent its deterioration or reversion to the parent stock, we have at the same time to provide, as we best may, for the want of a climate suitable in all respects for its healthy development. It has been supposed by some cultivators (reasoning from insufficient data) that plants are capable of being acclimatised; on the contrary we find that although many plants are capable of growing in colder countries than those to which they are indigenous, nevertheless every plant has a certain limited range, beyond which it cannot pass; and all the exertions of the cultivator, by gradually removing it to a colder climate by repeated transplanting, do not suffice to render it a whit the more hardy. It accords with general experience in regard to exotic plants, that the longer they are cultivated in a climate less genial than their native one, the less healthy and fruitful they become. The wheat crop does not afford an exception to this rule. Agriculturists are therefore in the habit of occasionally changing their seed wheat by importations from foreign countries.

Wheat is especially liable to degenerate when sown continuously, not only in the same climate, but on the same soil; which renders a change of seed even from one farm to another desirable. And in obtaining changes of seed, the farmer ought constantly to keep in view that the value of the change mainly depends upon the superior character of the climate and soil from which it is obtained. In Miller's Gardeners' Dictionary, it is remarked on this point:—"The most skillful farmers purchase seed, at least every other year by way of change; for they find that the seed continued long upon the same land

will not succeed so well, as when they procure a change of seed from a distant country; and the same is practised by the husbandmen of the Low Countries, who commonly procure fresh seeds from Sicily, every second or third year, which they find succeed better with them than the seeds of their own country." In Nova Scotia the best results have been obtained from seed imported from Western Canada.

A writer in the *North British Agriculturist* observes in reference to the quantity of seed, that it is in general considerably more than what is proper to produce the most abundant crop. The quantity of seed may vary from about 7 pecks to 18 pecks and more per acre; but farmers generally agree that we have seed enough when we employ about two bushels to the acre. This is the quantity used by Boussingault at Bechelbronn, but in the same district, and even on contiguous fields, the proportions of seed employed vary in the ratio of from one-half to twice the quantity specified, without any sufficient reason for this parsimony or prodigality. Donaldson recommends three bushels to the acre. The proper quantity of seed depends in a great measure on the state of cultivation and price of land and labour in a country. In countries where land is cheap it may be more profitable to scatter thinly over a great area; but where the price of land is high, it must be sown more thickly and receive a higher style of culture to bring in a profitable return. "Exposure and climate," moreover, "are important elements in judging of the quantity of seed. In Spring most soils are easily acted upon by alternate frosts and thaws, and if sunshine follows frosty nights, the young plants are injured and sometimes killed, thus the crop is thinned out when it is on the eve of tillering; to prevent this the seed should either be drilled or ploughed in. Land which has been summer fallowed requires less seed than land which has produced potatoes, and it again less than clover lea. The period of sowing also forms an element; when sown early it gives greater scope for tillering, while the plant obtains a vigour which enables it to resist adverse circumstances. The quantity of moisture in the soil is still another. If it is either deficient or in excess, the seed will fail to vegetate so vigorously. If the land is either very dry or very wet, sowing should be delayed. There are several other circumstances, such as the method of sowing, the quality of the seed, plumpness of pickle, and variety grown."

In Scotland, seed-wheat is not often committed to the soil without some previous preparation, even when the very best grain is obtained for the purpose.

Various methods have been adopted to preserve the wheat crop from smut,—the

most prevalent of which is pickling or steeping. We shall here follow the concise directions of M. Boussingault, in the *Economie Rurale*:—"Farmers are wont before putting their seed wheat into the ground, to prepare it in various ways with a view to destroy the germs of certain parasites which are believed to adhere to it externally. The process is generally called pickling, or liming, because milk of lime, in which the seeds are put to steep for twelve or fifteen hours, is often employed in its course. Means that are said to be more efficacious have also been recommended; some make use of alum, others of sulphate of iron, sulphate of zinc, sulphate of copper, sulphate of soda, and even white oxide of arsenic. All these means appear to conduce to the same result. We employ sulphate of copper, which indeed is the custom in a considerable part of Alsace, and I can assure the reader that our fields of wheat are never infected. 100 grammes (or about 3½ oz. troy, are allowed to a hectolitre or sack of nearly three bushels of wheat; the salt is dissolved in as much water as is held requisite for the submersion of the grain, which is steeped in the solution for about three quarters of an hour, after which it is thrown into baskets to drain, and being then spread out on the floor, is dried before being sown."

The following is the process of pickling with chamber lye as described by Mr. Ferguson of Glasgow:—"Pour 10 or 12 gallons into a large tub, and then a bushel of wheat; stir the whole with a short stick, several times round; then raise the tub, and pour off the light wheat and spores that float on the surface, into a riddle, whose bottom is covered with a thin gauze cloth. This riddle is supported by two sticks laid across the mouth of an empty tub. The liquid running through, leaves the refuse, which is carefully thrown aside, so as not to mix with the sound wheat. The contents of the first tub is then emptied into a willow basket, where it remains for a minute or two to drain off superfluous moisture. Then the basket is emptied on the floor, and a shovelful of hot lime sifted over it, and afterwards the whole is turned over three or four times, until it be observed that every ear of grain has taken on a coating of lime. This process is continued till the quantity for a day's sowing is completed, when the whole is put into sacks, and sown in an hour or as soon afterwards as possible. If sown by hand the sower requires to protect his eyes by a thin gauze veil, but the drilling machine does the work well.

The kiln-drying of seed wheat has been recommended as an equal, if not better preservative against smut, than the usual practice of pickling,—being preferable in one respect, namely, that after kiln-drying the seed can be kept unsown with-

out injury, whereas when prepared by pickling it must be sown immediately, otherwise it is very apt to lose vitality.

Boussingault tells us that in French farming, wheat is sown either upon a fallow or upon land that has carried some forage crop, or such crop as beans and peas; the same practice is followed in Britain.

Wheat requires a good deep soil, rich and stiff, containing a certain proportion of calcareous earth, and abounding in organic matter; light sandy, and other hungry soils, being unsuitable. The sub-soil should be dry and firm. In fact the capabilities of a farm in the production of wheat are regarded as its best test of value for the general purposes of agriculture.

Wheat requires a better soil, better climate, and better cultivation, than any other cereal crop, so that oats, barley, and rye, can be profitably grown where wheat would not ripen an ear.

Dr. Anderson some years ago gave a very lengthened detail of the constitution of the principal wheat soils of Scotland. These were Mid-Lothian, East Lothian, Renfrewshire, Peshshire, Morayshire, and Berwickshire. His conclusions are that they all contain, in large quantity, the whole of the substances necessary for the food of wheat and other plants, in a condition in which they are fitted to be taken up by the plant; secondly, that they may be divided into two classes, those characterised by the absence, or small amount of alkalis in the insoluble matter, the other by the abundance of these constituents. Theory points to the superiority of these latter soils over the former—a superiority which practice has long established, for the soils of the Carse of Gowrie and East Lothian greatly surpass all the other wheat soils of Scotland in fertility.

Dr. Wolff, of Leipsic, in reference to Dr. Anderson's researches, compares the soils of Scotland with those of Germany, in both of which are the same abundance of all the soluble constituents necessary for the nourishment of the plant. It is only in the quantity of humus that a striking difference exists, the wheat soils of Scotland being richer than those of Germany in this respect, while the latter contain in proportion to their humus a much larger quantity of nitrogen. The cause of this phenomenon is sought for in the different climatal conditions of the two countries, which are unquestionably of much importance in the estimation of the goodness and fertility of any soil, it being very possible, for example, that in Scotland, a soil may be well adapted for the cultivation of wheat, which in Germany would no longer afford remunerating crops.

We have said that wheat thrives on a stiff clayey soil; but that must be well

prepared for the crop. When sown on bare summer fallows, the soil must be loosened, exposed to the action of the atmosphere, and cleared of weeds, through repeated ploughings, harrowings, and rollings. Lime and manure should be applied in the month of July, and the seed committed to the soil in August or September.

When this crop is sown after the removal of a turnip or potato crop, one ploughing is sufficient, with a previous harrowing to prepare the ground for the drill machine.

Four single times of harrowing are deemed sufficient on ordinary wheatlands, in order to cover the seed, and two on lighter loams after the drill-machine (Donaldson); but occasionally very heavy lands require more to do the work effectually.

Considerable difference of opinion has been expressed regarding the relative advantages of drilled and broadcast sowing. Mr. Pawlett, in an experiment undertaken for the purpose of determining this point, found the produce of drilled and broadcast wheat to be as follows:

	Bush.	Pks.
Drilled wheat, per acre.....	34	3
Broadcast do., do.	33	3

showing a slight difference in favour of drilled wheat, and confirming the general opinion that drilling (which has many advantages over all other systems of planting) is the best way to ensure a plant, and consequently to get a good crop. "Many excellent crops have been grown from dibbled wheat, but the trouble, expense, and difficulty in getting it well done by hand has prevented its becoming more general in practice. My wheat is invariably drilled now at eight inches, and deposited as deep in the land as circumstances will permit."

With regard to wheat after fallow, Mr. Brown of Markle, was of opinion that the ground should remain unsown for a fortnight after the last ploughing is given, so that it might get in to a consolidated state, and be able to stand the harrowing process, without being too much subdued. However, most farmers will feel with Sir John Sinclair, that such operations must in a great degree be regulated by the weather and other circumstances, it being often necessary to sow the ground as fast as it is ploughed.

Wheat being the grain which above all others requires a long time for its development, should, in this climate, be sown as early in the season as possible, in order that the young plants may be thoroughly established before winter, although at the same time not too far advanced to suffer by frosts. In Europe the wheat sown in Autumn generally stands upon the ground for from 9 to 10 months; but the time varies with the climate in different countries.

The bulk of the crop, and generally its excellency, very much depends upon early sowing. All farmers are aware of this, and wheat sowing should therefore be invariably performed in good time in the Autumn. If this is not done, an opportunity for favorable sowing may be lost altogether, or the process delayed so long that the crop is hurried into bearing before it has time to perfect its vegetative organs, in which case the produce must necessarily be light. However, since the year 1773, Scottish farmers have been in the habit, to a greater or less extent, of sowing what is called "winter wheat" in the Spring months,—a practice which has been found very convenient by some agriculturists upon clay, as well as other soils, but only in those seasons when the wetness of the autumn prevents sowing at the usual time. Mr. George Cully, the celebrated farmer, stated that he had known winter wheat do pretty well when sown even in the beginning of April, but he did not approve of sowing so late as that,—not however from fear of a plentiful crop, but because it was so late in ripening, that six times in seven it suffered from the equinoctial gales. He was decidedly of opinion, from long experience, that the best time for sowing Autumnal wheat in Spring, was in February and the first ten days in March.

We are not aware whether any of our Nova Scotia farmers have tried the early Spring sowing of winter wheat on fall ploughed land.

The Spring or Summer wheats (properly so called) possesses some advantages, although for general purposes inferior to the winter wheats, the ear being short and the crop less productive. They remain on the ground for a much shorter period; though sown so late as the end of April or beginning of May, they will ripen as early as autumn sown winter-wheat.

Wheat of soft grain contains more starch and less gluten than that which is hard; while the former is preferred by the brewer, the latter brings a higher price in the market from being more suitable to the purposes of the baker. Southern countries are known to produce harder grain, than northern ones, and the researches of Davy and Payen show that the wheat of warmer climates is richer in azotised principles than that of temperate lands. But it is pointed out by Boussingault that we may have wheat grown in Europe fully as rich in azotised elements as any that is grown between the tropics. This conclusion is founded upon the experiments of Hermbstadt, who found that the application of different manures had a wonderful effect on the proportion of azotised matters in the grain. One hundred parts of the flour obtained from

wheat grown by the following applications yielded:—

	Gluten.	Starch.	Bran, Sol. matter and moisture
With human urine,	35.1	30.3	25.6
“ bullock's blood,	34.2	41.3	25.5
“ human excrement,	33.1	41.4	25.5
“ sheep's dung,	22.9	42.8	34.3
“ goat's do.,	32.9	42.4	24.7
“ horse's do.,	13.7	61.6	21.7
“ pigeon's do.,	12.3	63.2	24.6
“ cow's do.,	12.0	62.3	25.7
Soil not manured,	9.2	66.7	24.1

In general, therefore, the wheat grown in ground manured with the most highly azotised matters yields the largest quantity of gluten.

Every farmer who has experience is well aware that it frequently happens that wheat crops are so seriously injured during winter, by the inclemency of the weather, especially by severe frosts and heavy rains on ill-drained land, as well as by the attacks of grubs and other vermin, that towards the latter end of spring they present a very melancholy aspect, the crop being thin and the plants weakly. Sometimes this is the case to an extent so alarming that the wheat is ploughed up to make room for a crop of oats or barley.

On this account it is a very judicious practice to give a top-dressing in spring, which causes the plants to come away with vigour, and likewise to tiller freely, so as to occupy to advantage the spaces left blank by the winter failures.

Such a top-dressing is especially desirable in soils that are naturally too light to carry a heavy wheat crop. The manures generally employed for this purpose, and found by the experience of farmers and the researches of chemists to be the best, are

Nitrate of Soda.

Sulphate of Ammonia.

Superphosphate of Lime, (Dissolved Bones.)

Professor Johnston arrives at the conclusion, that in some cases, even so small a quantity as two bushels of dissolved bones will produce as good a crop of turnips as sixteen or twenty bushels of bones applied in the usual form—a conclusion that has led to great economy in the application of manure, and has recommended Superphosphate of Lime to the serious attention of all farmers as one of the most profitable manures that could be applied to the soil. As a top-dressing to all grain crops it is invaluable.

Nitrate of Soda and Sulphate of Ammonia have likewise been applied as a spring top-dressing to wheat with the best results; the former is especially to be used where, from deficiency of soil or inclement weather, the straw is weak.

The following experiment by Mr. Barclay, quoted by M. Boussingault, (*Rural Economy*, p. 419), indicates the beneficial effects of an application of Nitrate of

Soda to wheat, both as respects straw and grain:—

	Without nitrate.	With nitrate.	Difference in favour of the nitrates.
WHEAT—31 bush. 2 pks.	35 bush. 3 pks.	4 bush. 1 pk.	
STRAW—20 cwt. 19 lb.	22 cwt. 2 qrs. 26 lb.	3 cwt. 2 qrs. 7 lb.	

That sulphate of ammonia supplies an excellent manure for wheat, either when applied as a spring top-dressing or otherwise, has been well shown by the experiments of M. Schallenmann.

Mr. Stevenson has shown that the good effects of nitrate of soda are not confined to the crop to which it is immediately applied, but extend over a series of years. In fact he found the effects to be more decided upon the third crop after the application. He has no doubt that saline manures in general influence the produce throughout the whole rotation, which of course greatly enhances their value.

The wheat crop, like all other cultivated crops, is liable to the attacks of various parasites and other maladies. One of the most destructive, and certainly the most universal of these, is Smut, the remedy for which, and Rust, has been already so fully detailed in connection with the preparation of seed, that it is not necessary to enter upon further details. The wheat midge (*Cecidomyia tritici*) is likewise very hurtful in certain seasons. In the Carse of Gowrie alone, during the years 1826-8 & 9, it was estimated that this insect cost the Carse farmers £90,000. By using a skim coultter in winter ploughing, the pupæ may be buried too deeply to allow of the midges coming up next summer. It is well that it is only in certain favourable seasons that this pest is enabled to attack the wheat crops fiercely,—for we know of no effectual remedy to ward off its assaults.

HEMP CULTURE IN NOVA SCOTIA.

In a ship-building country a Rope Factory is one of the first requisites. Through the enterprize and enlightened views of one of our leading merchants that want is now supplied. A Rope Factory not only contributes to the success of the “Ship Manufacture,” but likewise opens a new market to our farmers. If Hemp can be grown in Nova Scotia as well as in Russia or the United States, there is no good reason why our own farmers should not benefit by this branch of industry. Now we know that Nova Scotia is very well adapted for the growth of Hemp Fibre, and we trust that some enterprising farmers will try their hand at its production this season. The following article from the *Toronto Globe* is suggestive:—

We were recently shown some very fine samples of hemp fibre, produced from hemp grown by Mr. J. G. Joly, of Quebec, on his farm at Point Platon. Mr. Joly has written a very interesting letter to the *Gazette des Campagnes*, which we have translated from

the French, and condense from it a few facts showing that hemp can be profitably grown in Canada, and that our ropemakers would do well to encourage home growth instead of importing the raw material from Russia and Kentucky.

He says that hemp was extensively grown in Canada when it was under French rule, and that quantities of it may yet be found growing in a wild state on many of the older farms in Quebec. He gives the result of a trial with seed from the so called “wild hemp,” seed imported from Piedmont, and from Missouri. The Missouri seed produced the finest plants, but the plants grown from wild hemp were but little inferior, and equal to the Piedmontese, while they ripened sooner than the others. The yield of raw hemp is given as 14,400 lbs. per acre, which, sold at a farthing per pound, gives a return of \$60 per acre, besides the seed, which yields an oil equal to linseed oil for painters use.

He states that the hemp can be grown equally as well as flax, and the operation of scutching and heckling it can be done in a flax mill, with a little alteration in the rollers, or by wooden hecklers, constructed chiefly for the purpose; the hemp in its raw state is rather bulky for carriage, but when prepared by hand or machinery it is greatly reduced in bulk, and is then worth much more. The price of Russian hemp at Quebec is given at 9 cents per pound, so that if we can grow an article equal to it, which he says can be done, hemp growing would become a profitable branch of agriculture. It takes six pounds of steeped raw hemp to make a pound of hemp ready to spin, or make into rope, and he says the raw material would readily bring a half-penny per pound if steeped, and conveniences could be had for scutching and heckling it. Perhaps this matter may engage the attention of Canadian ropemakers, and they could be induced to encourage a home growth of an article now largely imported at a great expense.

Mr. Joly left at our office some very fine samples of Canada Hemp, grown at Quebec, and prepared, some by hand and some by machinery; also, some specimens of rope manufactured from this hemp; a small quantity of the oil expressed from the seed; and also some cake for feed, manufactured after the manner of linseed cake.

From the success which Mr. Joly has met with in Quebec, where, we are informed, sixty farmers have grown this crop, we think it very desirable that a trial of it should be made in Ontario. Of course we would not advise any extensive experiments at first, but operations on a small scale might be sufficient to indicate the suitability or otherwise of our climate for the growth of hemp. Those who have scutching mills for flax should bear this subject in mind.

THE HESSIAN FLY AND WHEAT MIDGE.

The following lucid account of the Hessian Fly and the Wheat Midge of the Dominion, is from the pen of a Toronto correspondent of the London *Gardener's Chronicle*, and will be read with interest and profit by our wheat growing farmers:—

The Hessian fly, *Cecidomyia destructor*, first attacks the newly sown fall wheat in the

autumn, the earliest sown plants being the most subject to the pest. The fly deposits its eggs on the blade of the wheat plant, and when the young are hatched, in the shape of a whitish maggot, it eats its way at the junction of the leaf into the sap vessels of the stem, which, when too much affected, destroys the old plant before the winter. Often half the plant is affected, and the other half free; sometimes only a few of the stems are affected, in which case the mischief done is small. The maggots proceed with their work until they are prepared to go into their chrysalis state; they then assume the appearance of a flax seed, and either bury themselves in the earth or remain attached to the stem of the wheat, close to the lower joint, until the spring, when they turn into the fly, which again lay eggs on the wheat stem and leaves, and go through the same transformations, coming out as a fly ready for the new sown autumn crop. Hence the Hessian fly affords two crops of insects each year. The worms do not actually eat into the straw or stem, but appear to live by suction, and the straw gradually depresses and wastes away, until it finally perishes, or breaks off with the wind or weight of the ears. Comparatively late sowing is the preventive, but the only cure is sowing a kind of wheat which is not liable to be affected, and of which there are more than one.

In Canada, if we sow before the first of September, we are subject to the Hessian fly; if we sow later than the end of the first week in September, we are very subject to rust. This will be thought very early in England, but it must be borne in mind that our winter sets in, in full force, in November.

The Hessian fly is now not dreaded in Canada; it seems to have brought its own destroyer with it, which keeps it in check, and it now only occasionally takes a percentage of the crop.

THE MIDGE.

The wheat midge, or, rather, midges (for there are two of them—*Cecidomyia tritici* and *Cecidomyia cerealis*, Fitch, which are generally spoken of as "the midge," without distinguishing the species, they being very much alike), is a totally different insect from the Hessian fly. The insect in its fly state, makes its appearance from the 13th to the 20th of June according to climate, and is then seen in countless myriads. It attacks the new ears of wheat, piercing the outer husk or chaff, and depositing its small yellow eggs through the hole which it has made with its ovipositor. The insect most common is very small, has a bright orange body, the end of which is armed with its ovipositor; and it is through this that the eggs pass into the chests of the wheat ear. If the wheat is in flower at the time the eggs are deposited, the worms as soon as they have life (which seems almost immediately), work down to the bottom of the case which is to contain the future grain of wheat; they attach themselves to the growing end of the flower, and gradually absorb all the juices which pass from the stem, and which should form the future grain. The result is the yellow maggots called in your paper "red gum," and no wheat. If the grain is only just forming when the midge worm gets to it, it can still by suction or otherwise exist upon it, and destroy the grain; but, if when the insect pierces the ear the grain is already formed, and has attained a certain shape and strength, say one-third or

half grown, the midge worm is powerless, and finally starved, although it seems to obtain some nourishment, and will often leave an indentation in the grain, showing its presence. Often all the lower grains in the ear will be safe, and the upper ones will be destroyed; but if the entire ear is in a favorable state for the insect, it makes a clean sweep of it, and destroys every grain. As soon as it has run its course of destructiveness it appears as a little fat yellow maggot, which wriggles up out of the ear and falls upon the earth, into which it sinks for its winter habitation, or it is carried into the barn with the grain and is threshed out with it; going out with the straw, and coming out as a fly in due season. Thus it will be seen that this insect differs entirely from the Hessian fly in every respect; it only comes once in the year, never commences its ravages till June, and ceases with the ripening of the wheat.

It is, however, the most destructive pest known here; our fields may on the 10th of June promise 40 bushels per acre, and in two weeks we may ascertain the total loss of the crop, which often does not give back the seed. Our fine white wheat is the most subject to it, and so absolutely is it a question of a few days and season, that the whole of a field may be free except the wet spots, which by wet or dampness are a few days later than the rest of the crop; all these wet spots will be entirely destroyed. On the other hand the great body of a field which lies wet may be entirely destroyed, whilst a few dry knolls in it may be as entirely free.

Our course of husbandry has greatly tended to produce this curse to our country. Owing to various causes, to which it is not necessary further to allude, we seed down our fall wheat with clover, consequently all the midge worms which have fallen on the ground at harvest come forth in June amongst the clover, and go off to the nearest wheat field. In the June evenings, when the midge flies take wing, the air is full of them, and they spread in every direction.

It is only when the wheat stubbles are ploughed and fallowed, or sown to green crops, that the number of midge worms, or chrysalides, can be appreciated (the chrysalis is just like the worm, and remains in the shape of a yellow maggot.) In cultivating wheat stubbles the following spring and summer, these little yellow bodies are often in such numbers as to run down into the harrow tracks, and look like yellow sand—the land seems alive with them.

The midge came into this province in three directions; it travelled about 9 miles each season, at first devastating the greater part of the wheat crop. We knew nothing about it, and many districts gave up growing wheat altogether. Now, however, our experience has taught us that if we can get the wheat very early, there is a good chance of missing the midge, or if we can get it very late we are also secure; but from the Scylla of the midge we then fall into the Charybdis of rust, which is as fatal. If we could get late fall wheat not subject to rust, our fortunes would be made.

We have now several kinds of fall wheat which are called "midge proof," and these are now coming into general cultivation.

EFFECTS ON SPRING WHEAT.

The midge attacks spring wheat as badly as fall wheat, if it comes into flower in the right season. We, therefore, sow our spring

wheat very late, often as late as the 1st June, but generally about the 10th May; and as we have a kind, called "Fyfe" or "Fife" wheat (so called from its introducer), which does not rust, the spring wheat becomes a tolerably sure crop. This year all the early sown spring wheat is entirely destroyed, while the late sown is a good crop. Our fall wheat this year is also a good crop, particularly the "midge proof." The midge also sometimes attacks the barley, and is quite destructive, spoiling the sample; but as the worm, although it can live on, and in the substance of the grain, never can get out, or come to perfection as a fly, it does not help to increase.

The only known cure for the midge is ploughing with the Michigan plough; this consists of two turn furrows, one of which, like an English skim coultter, takes off about two inches of the surface, including the weeds and stubble, and deposits it in the bottom of the furrow, while the second, or main turn furrow, raises the second portion of the land slice, and deposits it over the first portion, thus entirely burying it to a depth of several inches. If this is not again turned up till the following year, or out of season for the midge, the insect is destroyed. But the course of Canadian agriculture, and the extraordinary ignorance and prejudice of the great body of our farmers, renders it impossible to carry out this, or any other system generally; and we, therefore, resort to the other measure before mentioned.

You speak of the midge as increasing in England; when the subject is once understood the cure is half effected, and I trust that this information, which is the result of actual experience, may be useful. *Vectis.*

SHORT HORNS.

Our readers are always glad to hear of the welfare and progress of the thoroughbred animals imported from time to time by the Board of Agriculture. It gives us pleasure to insert the following notice, and we shall feel obliged if other owners of Short Horn or other pure stock in the Province will keep us informed from time to time of their doings:—

"Agnes" is doing very well, but is troubled with lice. She is not a great milker, but her milk is good and rich. Her calf, "Charles the First," (as I have named him) was sired by "Sir William," belonging to our Society, and is nearly six months old. He has had no extra feed, but well cared for. I weighed him to-day, and he weighed 400 lbs., and girths four feet one inch. I should call him a good animal; is nicely marked red with white spots. I shall offer him for sale to-day at \$35, as I am selling off my farm stock.

I have a heifer calf out of a cross of Durham and Ayrshire, after "Sir William," a perfect beauty. I intend raising it. "Sir William" is getting some fine stock.

C. C. HAMILTON.

LEICESTERS.

We learn from the Hon. R. A. McHefey that the splendid Ewe which gained the first prize in the Certified Pedigree Class at the Provincial Exhibition dropped

two fine Ram Lambs on the 10th instant. These are sired by the Ram which took the first prize at the Exhibition, a thorough-bred animal imported by the Board of Agriculture two years ago. Mr. McHaffey has been breeding pure Leicester stock since the year 1855.

THE MOWING MACHINE.

We are pleased to learn that Mowing Machines are finding their way into the fertile valleys of Cape Breton. At a meeting of the Agricultural Society of Middle River, Victoria, on the 25th Feb., it was agreed to import one of these machines. We have no doubt the Deputation which the Middle River Society sent to the Provincial Exhibition, took back with them some sound ideas, as well as good animals.

FARM OPERATIONS FOR MARCH AND APRIL.

Up to the time of writing, the winter has been unusually mild and pleasant along the Atlantic coast. The fickleness of the season may give us early bland airs, freedom from frost in the soil, and good weather to push forward spring work this year; but, in the natural order of things, this can hardly be expected. A warm winter is often followed by a rough, harsh, cold, wet spring. Winter may linger, and we may thus have full time to get ready to make the very most of the good weather when it comes. Make full memoranda at once of those kinds of work which ought to be done—work for rainy weather, work for freezing weather, work for fair weather when the soil is too wet to plow, and proper field work.—Know beforehand how much labor can be profitably employed at each job, and calculate, if possible, to leave yourself free for extra work, not included beforehand in your calculations, or to take hold and finish up any job that drags, and requires more time than planned for. We have often compared well-considered plans to axle grease on the farm wagon.

Thousands of farmers are thinking anxiously about the seed they shall sow and plant. A more worthy subject for serious thought and investigation can hardly have their attention. The papers are full of advertisements and notices of new articles, from Norway oats to the most thoroughly established varieties of spring wheat. The effort to get something new that has merit enough to base great stories upon, and lead to sanguine expectations, leads to the introduction of many worthless things. Dealers generally care less for what is really good, than to know and to have what will sell. If seeds are scarce and high, as is onion seed this year, the temptation is very great to mix it with old seed. In Eng-

land, it is very common to use the seeds of charlock, or some other cruciferous plants which have been heated, and the vitality destroyed, to mix with turnip seed. It is precisely on the principle of watering milk, and over-issuing railway stock. If possible, get samples, and see how many of the seeds will germinate, as directed for clover seed. We are far from condemning the novelties, whatever price they bear; but this we are free to say, the price bears no direct ratio to their value. The fact that \$2 a quart is charged for oats, or \$50 apiece for potatoes, shows that there has been a good deal of interest excited by advertising, or otherwise, and that either the owners mean to put a nearly prohibitory price upon the articles, or believe they will make more this year and next by selling now at high rates. It often pays to buy at rather high prices, in order to raise one's own seed for another year, but it surely does not pay unless the article is of established excellence, and one knows he gets it genuine. Do not buy simply because very improbable and wonderful stories are told in print, or anywhere, about oats, Egyptian wheat, or any similar thing. The best way is, for several neighbors to club together, and thus get and examine samples. Do not expect to raise heavier grain than the seed you sow.

HINTS ABOUT WORK.

Breeding Animals must be well fed. A quart or two of oil meal daily, or an equivalent of rye bran, of coarse corn meal and wheat bran mixed, is good. If roots are plenty, cut up and feed four to eight quarts a day with the meal; if not, save them until just before calving, and after that, to be used until grass comes, or the rye for soiling is fit to cut.

Cows.—Prepare roomy, loose boxes for cows to calve in, and litter them well. The cows may be kept tied until the time actually comes, when it is best to give them the freedom of the box.

Mares should be treated in very much the same way; a few carrots are an excellent addition to their diet, and roots and oil cake may be fed freely if care be taken that they do not induce too great laxness of the bowels; constipation is to be always guarded against in animals approaching parturition.

Sows should be especially guarded against it; and this is easily effected by feeding raw roots, mashed, and sprinkled with bran, to give them a relish, and to add to their nutritious value. The sow must have her quiet, warm nest, with plenty of straw, and be let alone. A big, blundering brute will not unfrequently overlie her young, and kill many in this way. To prevent this in a measure, it has been advised to arrange slanting rails at the back of the pen, so that the sow can not crowd herself against the rear

partition, and that the young may have a place of safety at all times. This is especially desirable if sows are cross, and inclined to eat their young ones. Such an unnatural appetite is usually accompanied by constipation and feverishness, which are relieved in most cases by the diet advised.

Sheep.—As the weather grows warmer, look out for ticks, scab, and lice. We have great faith in carbolic soap, and this may be applied without fear of injury to the animals. The wool should be parted, and the solution squirted in from a bottle with a quill in the cork, or poured from an oil can with a small nozzle. If ewes yearn early, have a care that the lambs do not get chilled; visit the pens frequently. Chilled lambs, apparently past succor, may often be revived by bringing to the fire, giving warm baths, followed by friction with dry cloths, and a little mild milk punch.

Horses are often injured by their exertions to draw heavy wagons out of miry spots in the road. Spavins are frequently caused in this way. After such exertion, the horses' legs ought to be hand rubbed for an hour a day, for several days. This is a gentle friction by the hand up and down the legs. Coarse horses seldom require it, but high-bred ones are much benefited by the operation.

The Workshops.—Every farmer should at least have a good work-bench, tolerably supplied with carpenters' tools, and to these many may profitably add soldering irons, awls, and needles for mending harness, a rivet set and rivets, paint pots and brushes, and a variety of other tools. There is a great deal of work for rainy and cold days that may be done—like mending and painting farm implements, making bee-hives and honey-boxes, hens' nests, chicken coops, etc.

Surface Irrigation.—As the snows melt, the trickling streams carry fertility wherever they go. If they can be conducted from the roads upon the meadows, a marked increase will be noticed.

The Grass Crops, which may also be considerably increased by top-dressing with plaster, ashes, superphosphate of lime, Peruvian guano, and other soluble manures. It rarely pays to apply stable manure or composts at this season.

Liquid Manure on grass and grain fields, and on rye and wheat sown for soiling, is more advantageous in spring than at any other time. It should be applied as soon as the frost is out of the ground.

Field Work.—Animals must be gradually accustomed to hard labor, or their necks and shoulders may gall badly. Where galls or tender spots occur, they should be washed with castile soap and cold water, and covered over night with compresses of wet cloths. As more labor is demanded, increase the feed. Never

plow when the ground packs hard from the moisture it contains. Some sandy soils never pack thus, and never bake into clods, but loamy and peaty soils do, and a field is often greatly injured if plowed a day or two too soon, or if worked in any way while wet.

Fences.—Before the ground settles after the coming out of the frost, and while it is yet too wet to plow, embrace the opportunity to reset old fences, and put up new ones. Try the posts, and strengthen weak ones by stakes driven along side; replace rotten rails with strong ones.

Getting out Manure.—This is work for frosty mornings, as the wheels and teams would cut up the land badly at other times; or it should be delayed until the ground is somewhat dry.

Composts made now will heat and be in good order for the corn crop. Muck got out in the winter will be in condition to be thus used, mixed with $\frac{1}{4}$ or $\frac{1}{3}$ its bulk of barn-yard manure.—*American Agriculturist.*

The Garden.

THE ASPARAGUS BED—ITS FORMATION AND CULTIVATION.

There is, perhaps, no succulent vegetable more generally valued for its palatable, nutritious, and healthful qualities than asparagus, which can be successfully cultivated in any climate, from the tropics to the cold, bleak shores of Lake Superior, where it is found growing wild. Asparagus is also found in its wild state in low and often flooded fresh and salt meadows, as well as in the barren salt lands of the seashore, and, when brought under proper cultivation, it gives a greater return for the labor bestowed than any other production of the market garden. Its proper mode of cultivation is less understood than any other vegetable produced for table use. My first knowledge of asparagus, (when a boy,) some forty-five years ago or more, was derived from an old bed in my father's garden, which bed was put out by my grandfather before my father's recollection. There the asparagus was cultivated, on the same spot of ground, until about 1810, when it became necessary to have the garden in another location. The old asparagus roots were removed and carefully put out again, where they remained until 1852, when the bed was destroyed for the purpose of erecting a building. From the time of the removal of the roots until they were destroyed, forty-two years elapsed, and from the time of the first planting of the roots by my grandfather till they were destroyed was at least one hundred years.

MANURING ASPARAGUS BEDS.—The bed was always well cultivated; the old stalks were cut off in the fall; the bed was liberally covered with manure, which was forked in in the spring. Until its destruction, the asparagus never decreased in quality or quantity. These facts of my own knowledge are satisfactory to my mind that the limited production of asparagus is only from a neglect of its proper cultivation. I find a great variety of

opinions with writers in relation to the correct mode of propagating and cultivating asparagus. Some writers say it is necessary that the earth should be removed three feet deep, or more, and the bottom filled in with stone, old boots and shoes, and the earth removed should be mixed with manure and returned, and the plants or roots should be set out eighteen inches or two feet apart, and be planted twelve inches deep. Others say that six to fifteen inches apart, and four to twelve inches deep, is preferable. With such badly-balanced opinions among so many theorists, no definite mode of cultivation could be arrived at. Some ten years since, I made an entirely new garden where I now live, and always having enjoyed the luxury of asparagus without depending upon the market for my supply, I determined to make a bed to suit my own views of the nature of the plant. My soil is a sandy loam. I prepared my ground with a large quantity of well-rotted manure, and divided my ground into beds five feet wide and twenty feet long. The ground was then dug up one spit deep, the length of a long spade blade. Believing that asparagus required the warmth of the sun, air, and surface moisture, and having no fear that the roots would run down beyond my control, I had my bed trenched (or marked out) four inches deep and twelve inches apart. The roots were two years old, and were taken from a garden adjoining my own. They were placed in the trenches twelve inches apart, as soon as dug from the ground where they grew. Each branch of the roots was spread out horizontally, and they were all covered four inches deep. The asparagus grew apparently as well as though the roots had never been removed.

SALT FOR ASPARAGUS.—The next year I cut from the bed in sufficient quantity for my own table. Every season, when the weeds commenced growing, I sowed broadcast one half bushel of salt, and the same quantity twice afterward, as the weeds began to recover. I always have asparagus before any appears in the market from the market-gardens in the neighborhood, and cut it every day from the time I commence until the season ends. The productiveness of my bed has increased every year, and all gardeners and others who have seen it pronounce it the most prolific bed they have ever seen. The average growth of the stalks, at the time of seeding, is five to seven feet in height. I never cut my asparagus until it has grown at least four to six inches above the ground, and we never cut it over one inch below the surface. Some writers advise cutting two to six inches below the ground. But at that depth the bottom of the stem is always tough. Prof. Mapes once stated that there were twenty-eight species of asparagus. Some writers have attempted to classify the different qualities. With my experience in raising and largely consuming the article, I think that I could quite as easily distinguish between the taste of a white hen's egg and that of a black one, as I could tell the difference in the quality or taste of the purple or blue-headed asparagus from that of any other color or species of the plant.

PLANTS.—No plant will pay the market gardener so much money for the labor as the asparagus. But remember, always grow your own roots from seed; trust not the seed-shops for roots. If once you have got a good, healthy plantation, the bed will not run out

for a hundred years, provided it is always kept free from weeds, and manured well. I manure mine four inches deep each year. From my bed, eighteen by thirty-six feet, I take at least fifty dollars' worth yearly. To those who wish to grow their own plants, it is simply necessary to sow the asparagus in drills like onions; cultivate well the first summer; if they do well, they will be large enough in the fall to set out then, or during the next spring; in two years from that time they are of sufficient strength to stand cutting.

Asparagus comes only from one common centre, and hence it is not advisable to purchase old plants.

Many do this, thinking they can get a product so much quicker, but they are mistaken; young plants are invariably the best. Neither must the roots be planted too deep. If the roots are near the surface of the soil, the stems will start much earlier than if put a foot below, as is usually practiced.

THE ASPARAGUS BEETLE.—This asparagus beetle has become a formidable enemy to asparagus culture on Long Island, and it appears to be slowly spreading inland. It is now ten years since it made its appearance in this country, having been brought from Europe, where it has been known for a long time.

Mr. A. S. Fuller states: "When living in Brooklyn, a few years since, my asparagus beds were attacked by this beetle, and I tried salt, lime, ashes, and various other things, with scarcely any success. There is, however, one pretty effectual remedy, and that is, allow your hens and chickens to run in the asparagus beds as soon as the beetle appears. Birds will also assist in their destruction, if permitted to do so unmolested. In the fall the asparagus tops should be cut down and burned on the bed, and a little straw or other combustible material added, as many insects or their larva will be destroyed in this way."

THE PROFITS OF CULTIVATION.—Inquiries have been made of commission-merchants and market-gardeners as to the money value of asparagus per acre, and their opinion is unanimous in the statement, that if rightly managed, an asparagus bed of several acres will pay a larger profit per acre than the same space devoted to any of our smaller fruits. Figures from \$400 to \$700 per acre have been named. When we consider how easily the crop is marketed, requiring no expensive berry-baskets or crates, or the trouble of renewing the vines every three or four years, or the possibilities of loss in times of picking, because of rain, etc., and that, once well established, it will last a life-time, it should receive more attention. It certainly requires very rich land to grow large asparagus; but the yield is very great, very steady, and it always commands a good price in market.—*The Horticulturist.*

[Mr. Hutton of the Horticultural Gardens has usually a supply of good Seedling Asparagus plants, to supply those who wish to form beds of this delicious vegetable. It is the most valuable vegetable we have in Nova Scotia, because it is the first green thing we can get out of the garden in early spring time.—ED. J. A.]

THE NEW TOMATOES.

The present season is fertile in new varieties of Tomato. The following ap-

pear to be the leading kinds, of which we think the Crimson Cluster likely to prove the most profitable and satisfactory in Nova Scotia. The descriptions are chiefly taken from the advertisements of seedsmen in the United States:—

KING OF THE TOMATOES.—A new and superior variety of this valuable esculent, combining more good qualities than any other variety in cultivation. Plant, strong and vigorous; fruit, above medium size, grows in clusters; form round, somewhat flattened at the ends, seldom creased or wrinkled; color, a deep, rich red, very showy, and attractive in appearance; flesh, very solid, with but few seeds, of fine flavor; very productive, ripens with the Tilden. Its great beauty, and remarkable keeping properties make it a most desirable market variety, while its solidity and agreeable flavor make it equally desirable for canning.

GENERAL GRANT.—Size, above the medium, three to four inches in diameter, growing in clusters; form, round, slightly flattened, very regular, symmetrical, and rarely ribbed or wrinkled; color, brilliant, glossy crimson; flesh, unusually firm, solid, and free from water; weighing from ten to twenty pounds more per bushel than any other variety; skin, remarkably fine, smooth and shining, coloring well up to the stem; very productive, and of the finest flavor, bears carriage well, and keeps in good condition a long time after being gathered.

Another advertiser thus describes General Grant:—

We take great pleasure in announcing to the public that we have secured the entire stock of this justly celebrated Tomato. It originated in the garden of an amateur, who, after growing it for a number of years, in connection with all the leading sorts, became convinced that it was far superior to any other, and that it should be widely disseminated; and for this purpose it was put into our hands. In consideration of the many disappointments experienced in the introduction of new varieties, we have given it a thorough trial of two years; and it has far exceeded our expectations—ever attracting great attention wherever exhibited, taking the first prize above all others at the Massachusetts Horticultural Society's Exhibition, the past two years. We feel the fullest confidence that too much cannot be said in its praise. We believe it the nearest approach to perfection of anything of the kind yet offered, combining more superior qualities.

Size about medium, three to four inches in diameter, growing in clusters. Form round, slightly flattened, very regular, symmetrical and rarely ribbed or wrinkled; color brilliant glossy crimson; flesh unusually firm, solid and free from water, weighing from ten to twenty pounds more per bushel than other varieties; skin remarkably fine, smooth and shining, coloring well up to the stem—a quality very desirable to those preparing them for the table. Very productive, and of the finest flavor; bears well, and keeps in good condition a long time after being gathered, retaining its goodness, and free from wilting. It will be found to ripen uniformly, and as early as, if not earlier than, other varieties. Our whole stock of seed has been grown for us by Mr. C. N. Brackett, Chairman of the Vegetable Committee of the Massachusetts Horticultural Society, and saved only from the most perfect

fruit; and we are warranted in saying that it cannot fail to give satisfaction in every instance.

BOSTON MARKET.—An improved variety of the "Large Smooth Red;" very productive, showy, and of superior quality. It is extensively grown by the market gardeners in the vicinity of Boston, who esteem it above all others as a market variety. Our Seed was selected from the stock of one of the most successful growers in New England.

ORANGFIELD PROLIFIC.—An English variety of great merit; the earliest and one of the most productive varieties in cultivation, a week earlier than any other variety. The dwarf and compact growth of the plant makes it particularly desirable for forcing.

This variety would seem to be well worth trying here, where our seasons are too short for the late kinds.

CRIMSON CLUSTER TOMATO.—This variety grows in clusters of from 15 to 30, each cluster weighing from 4 to 6 pounds. Fruit, of first quality and very early, perfectly smooth, of average size, and of a scarlet crimson color, delicately tinted with specks of pure golden yellow. It ripens its whole cluster at once.

In reference to the Crimson Cluster, we find the following remarks in the *Horticulturist*:—

"This is the vegetable novelty of the season, entirely distinct from all other varieties, in the fruit being formed in clusters, having from fifteen to thirty of the average size of tomatoes in each; each bunch or cluster averaging from four to six pounds, resembling in form a bunch of grapes, but with "berries" of mammoth proportions.

"The fruit is perfectly smooth, of a scarlet crimson color, delicately tinted with specks of golden yellow. Independently of its value as a vegetable, it is a highly ornamental plant trained against a trellis or wall, so as to display its immense grape-like clusters of crimson fruit.

"It was originated in 1867, by Robert Revell, Florist of Norwich, Ct., who claims it not only to be entirely new in character and beautiful in appearance, but having the valuable quality of ripening the whole cluster of fruit at once, and earlier than any other variety of its size that he has tried. Mr. Revell's opinion is worthy of entire credence, being a practical horticulturist, with no interest whatever in the sale of the seeds or plants of this tomato, and is well known in the trade as a man of sterling integrity."

AUCUBA JAPONICA.

This fine evergreen is much less known, or used with us, than its merits deserve. The foliage—which is heavily and gracefully massed on extremely dark green stems—is of a rich, glossy green, splashed or blotched all over with gold. It is one of the most showy variegated shrubs, as well as the most useful, with which we are acquainted. Our specimens—which are large—are turned out of the pots at the end of April, and planted in conspicuous positions, out of doors, under the shade of trees (not too dense), when they thrive without any attention what-

ever. In October they are lifted, and the roots—whose name is legion—are unsparingly reduced so as to render storage in a pot practicable. This ordeal should not be inflicted during a dry, hot spell, or windy weather, but rather on a cloudy, damp day, which goes far to counteract the severe check. Any light porous compost will answer, but the best is leaf mould, with a portion of peat and a good sprinkling of sharp sand. Manure is not required; but cocoa fibre is gratefully received and appreciated. A shady and well sheltered position is indispensable, with a sufficiency of water (in the absence of rain), until the first appearance of frost, when a transfer to the conservatory becomes necessary.—Whilst the pots remain out of doors they must be plunged to their rims.

New varieties have been lately introduced from Japan, producing very showy berries, for which large prices were demanded. The following extract from William Bull's "Catalogue of New and Rare Plants" may be interesting:—"It may be as well to state that the Aucuba is a dioecious plant—that is to say, some of its individuals produce only male, others only female flowers, and that some eighty years ago the ordinary Aucuba was introduced from Japan, but the plant or plants so introduced happened to be females; by propagation, the whole stock in Europe sprang from the original introduction; and Japan from that time being a sealed country, the male plant could not be obtained. To the celebrated traveller and collector, Robt. Fortune, is due the merit of introducing the first male plant. Lately there have been several most important and distinct varieties introduced by Dr. Von Siebold, including male and female kinds, with plain green unspotted leaves, also others in both sexes, having blotches of variegated foliage."—*Gardeners' Monthly*.

THE BEST STRAWBERRIES.

A. B. Butler, of Columbus, Ohio, gives, in the *Farmer's Chronicle*, his experience on the culture of the strawberry in Central Ohio. For a large plantation for market purposes, he recommends the Wilson for the first half, and the Jucunda for the last half of the season. The Wilson comes in nearly as early as any of the valuable sorts, and gives its best fruit in about two weeks. When it begins to fail, the Jucunda comes well into bearing, and continues to produce its uniformly large-sized berries to the close of the season. The Wilson is quite hardy in Nova Scotia.

NOVELTIES IN ASPARAGUS.

It has remained for the American horticulturists to inaugurate novelties in the way of new sorts of Asparagus. What the pretensions of these novelties are we know full well from the glowing accounts

and illustrative pictures that are published of them in the American Horticultural Journals. We reproduce descriptions of what seem to be the two leading sorts, and without in any way authenticating their accuracy, we still think that they may be worthy of trial by our gardeners:

CONOVER'S COLOSSAL ASPARAGUS.—This variety is said by the advertisers to be the best and most valuable novelty in vegetables introduced in many years. It was raised on Long Island, and very much improved from seeds imported six years ago from Europe, has been thoroughly tested alongside of the best-selected stock of both foreign and home-grown seed. On the same soil, and with the same cultivation and manure, it has made fully *four times the growth* of the best Oyster Bay Asparagus of the same age. It is such a vigorous grower that, at two years old from the seed, it will invariably send up from fifteen to forty sprouts from one-half to one and a half inches in diameter; consequently Asparagus may be cut for market or family use at least a year in advance of the ordinary sort. The color is deep green, and the crown very close.

LESHER'S ASPARAGUS.—This sort is said to be noted in the Philadelphia market, and "excels in stature, weight and excellence, by a very long odds, anything of the kind ever seen or tasted."

Bunches of 14 stalks or spears, weigh from 4 to 5 lbs.; each stalk from 1 to 1½ inches in diameter, and 12 inches in length; tender as marrow to the very end.

To grow Asparagus to perfection, the roots must be planted 3 feet apart each way. Mr. Leshar has sold \$1000 worth of Asparagus from one acre, planted in this way.

ADORN YOUR RURAL HOMES.

The people of Nova Scotia have done a gross injustice to themselves. They have neglected to adorn their Rural Homes. It is true that in some of the more fertile and flourishing districts, we have a decided appreciation of the beautiful,—comfortable, neatly-painted houses, embosomed in trees, with flower plots scattered before the parlour windows, shedding a fragrance upon the passer-by; but on many of our country roads we may travel for fifty miles without once meeting with a cottage that looks out upon the road with a pleasant smile, as if the owner or his family cared a straw for the beauties of art or nature. When strangers pass through our country, and report that they have found it a cheerless and desolate one—an Acadian desert—there is a loud outcry that gross injustice has been done to us. But who is to blame? If the clematis and the honeysuckle and Virginian creeper, and the ordinary forest trees and ornamental bushes of England and America, will grow in Nova Scotia, why are they not to be seen around every cottage home? The *Horticulturist* for April gives good advice:—

Take carefully from your woods or fields

the evergreen spruce or fir, and plant a dozen or more in front of your door. Plant along the road-side a few maples and elms in alternate rows; let your wife or daughters get some flower-seeds and bulbs, and plant those also in front of your parlour window; paint up your fence, and make it neat.

Then wait for the gentle warmth of the sun, and watch the appearing of the leaves of the trees, the budding of the flowers, the coming forth of the bloom of the honeysuckles and roses, and notice how quickly the creepers climb up the sides of the house.

Wait, too, until some beautiful day in summer, when one of your old farm friends and his family come to visit you. Listen to their exclamations of pleasure at the simple and wonderful transformation; look at the pleased faces and bright smiles of your wife and children, and you will feel you have at last got something worth praising—something to compel respect from your neighbours.

Watch the travellers by your house, as they partially stop and look over your little yard, and with silent praise testify to its beauty.

When some Sunday afternoon comes in early summer, and you return from church and drive up to your house, as you look over the fence, the flowers, shrubbery, and lovely deep green of the silk-soft, wavy grass will impress you with sentiments of beauty, you can not force away. How charming it is, and yet how little it cost!

Watch the influence of these little things upon your children, how rapidly their taste and manners improve; how much more cheerful they are in disposition; how quickly they gain a superior standing among their school-fellows; how popular their home becomes as a visiting-place by their friends.

See how gradually books and papers find their way into your house—how well they are read and remembered; see how insensibly your own tastes improve; how much better you farm it than formerly; how well you are able to get along. The farm produces more, and, notwithstanding the apparent increase of expenses, yet you are able to meet them, and find, at last, that it does pay to adorn your homes.

The influence will not rest here. This is but the commencement of a series of salutary lessons which must be taken. Every one of them will produce a greater and still increasing good; the exertion will be less and less hard, and instead of being, as it once was, an object of dread, the beautifying of your place will become a *labour of love*.

There is a class of persons who come out from a city to locate in its suburbs with ill-defined notions of how to appreciate and enjoy country life to best advantage.

By the time their house is finished their capital is entirely exhausted, and further improvements seem to be impossible. For months, or even years, the *debris* of the builder hangs around the house in unsightly heaps; or, if even wheeled away, no effort is made to lay out the ground neatly, and form neat lawns.

In how many towns and villages have we seen scores of such houses, repulsive in their very plainness, and always carrying in them an unfinished look!

By and by the place changes hands, and the new proprietor begins to improve his lots or acres as soon as he can, by setting out choice trees, shrubs, and flowers. He thinks nothing can make home so attractive to his

family, or so delightful to himself, as the cultivation of a few of nature's fairest gifts.

He twines the honeysuckle around his porch, and in summer sits on the piazza, and watches the humming-bird and bee fly in and out, gathering their fragrant store.

He decks his lawn with beautiful tulips, peonies, roses, pansies, dahlias, and other flowers, and laughs to see how his neighbours stop before his gate and gaze with admiring eyes on the delicious sight.

What a charm his cottage immediately possesses, and how great the contrast with other plain and barren yards around!

Year after year this tasteful man adds here and there many a choice root and plant, and never fails or flags in his love for such beauties until the little field becomes almost a paradise in itself.

We can not expect great results from every suburban resident. Tastes differ, and people differ in their powers of application and perseverance; but every human being is capable of exerting an effort and accomplishing some such result, be it of greater or less comparison.

Plant out handsome variegated shrubs, the Japan quince, snowball, deutzia, and others, that, when flowers are lacking, there will be something to give pleasure.

Plant out evergreens, that, when both flowers and shrubs are gone, there will still be left an element of life and beauty, and your grounds not seem altogether bare and desolate.

Every owner of a country place, from a single lot to a villa site, or a large farm, should possess, according to his ability, either few or many of these charming adornments and indispensable accompaniments of a well-kept country home.

The possession of them will enable him to spend his days in peace, and enjoy, with quiet contentment, the luxury of such a rural life, while the influence of these simple yet beautiful charms will be productive of an everlasting good in both mind and heart.

"More than building showy mansions,
More than dress and fine array,
More than domes and lofty steeples,
More than station, power, and sway,
Make your home both neat and tasteful,
Bright and pleasant, always fair,
Where each heart shall rest contented,
Grateful for each beauty there.

"Seek to make your home most lovely,
Let it be a smiling spot
Where, in sweet contentment resting,
Care and sorrow are forgot.
Where the flowers and trees are waving,
Birds will sing their sweetest song;
Where the purest thoughts will linger,
Confidence and love belong.

"There each heart will rest contented,
Seldom wishing far to roam;
Or, if roaming, still will ever
Cherish happy thoughts of home.
Such a home makes man the better,
Sure and lasting the control;
Home with pure and bright surroundings
Leaves its impress on the soul!"

We would rather see our farmers spending their energies in raising heavy crops, than in attempts at ornamental farming, but it always pays to make home comfortable; where there is the will there is the way, and the time to do it.

An attempt is being made in Scotland to revive falconry. The Marquis of Bute is said to have taken a great liking to this species of pastime.

WORK IN THE HORTICULTURAL DEPARTMENTS FOR MARCH AND APRIL.

ORCHARD AND NURSERY.

Planting, in some localities, can be done, so soon as the frost is out of the ground; but at the North, generally, it is better to wait until next month. A young tree, put into cold soil, and exposed to drying March winds, has a hard struggle.

Shrivelled Trees, that have become dried during transportation, are to be placed in a trench, and covered, root and branch, with fine, mellow earth. In about a week they will be found to have regained their original plumpness, when they may be taken out, properly pruned, and planted.

Heeling in should be done with trees as soon as they arrive, if there is to be the least delay in planting. The importance of keeping the roots of trees from drying cannot be overestimated.

Grafting may be done first on the cherry, and later on the plum. Apples and pears do better if left until the buds commence to start.

Cherry Stones, for stocks, start very early; plant as soon as the frost is out of the ground.

Stocks budded last year are to be headed back.

Evergreen Seeds—Many inquire about raising evergreens from seed, and some complain of failure. It is useless to look for success unless some provision is made for shading the young plants. On a small scale, the following plan, suggested by Meehan, is said to work well. "A common board frame is placed over a carefully-prepared bed of light mould, and covered with shaded, hot bed sash. Under each corner of the frame is placed a prop, raising the bottom about three inches above the surface of the ground. The advantages of this contrivance will at once be appreciated when we consider that the most essential conditions in raising evergreen seedlings are a moist atmosphere, protection from the rays of the sun, and, at the same time, a free circulation of the air through the plants."

FRUIT GARDEN.

Strawberries may be set as soon as the ground can be worked. Take the country through, and the Wilson will be found to be the favorite; there are better varieties, but this is the most generally reliable. Set the plants eighteen inches apart, in rows two feet apart; keep the ground clean, remove all runners and blossom buds, and next spring there will be a good crop.

Blackberries and Raspberries are best set in autumn. Spring planting should be done as early as the season will admit. Cut the canes down to the surface of the soil. Blackberries are usually put in

rows eight feet apart, and raspberries from four to six feet, according to the variety.

Grape Vines.—Prune those that were not attended to last autumn as soon as the frost is out of them. Keep young vines to a single cane, or two canes, until good strong ones, half an inch in diameter, are secured as the basis of the vine.

Currant Cuttings should have been put out last fall, but they will do fairly if set now. Pack the earth well about their lower ends.

Currant and Gooseberry bushes start early, and should be transplanted as soon as practicable. Prune those that need it.

KITCHEN GARDEN.

Preparation and forwarding are the order here. Every one likes to be just a little ahead of his neighbors with early crops, and if one markets his produce it is well known that a few days in earliness makes a great difference in the receipts.

Hot-beds are of great use in getting seedlings, and there is scarcely any subject concerning which we have more letters of inquiry. The requisites for making a hot-bed are boards, glazed sashes, manure in a state of active fermentation, and a supply of light, rich soil. The old way of making a manure stack on the top of the ground, and putting a frame over it, is well-nigh abandoned. It is more economical of manure and other materials to make an excavation. All the operations depend upon the size of the sashes. Six feet by three is the regular size, but any other will do. Select a well drained place, facing to the south, and sheltered by a fence, building, or hedge, from prevailing cold winds; make an excavation two feet deep, of a width and length to accommodate the sash. Drive down stakes, and board up the pit, having the boards at the rear 18 inches, and those in the front 12 inches above the surface. The manure to be used should be in a state of active fermentation—a condition that may be secured by turning over stable manure two or three times, at intervals of a few days, according to the temperature, watering it if it becomes dry. A good rule is to form the manure into a compact, conical heap, and when it "smokes" turn it over. Fill the trench with fermenting manure, pack or tread it rather firmly, cover it with six inches of light, rich soil, and put the sashes in place. Put a thermometer in the soil, and when the heat declines from 100°, the sowing may be done. Sow Tomatoes, Egg Plant, Peppers, Early Cabbages, etc., in rows four inches apart. The soil covering the seeds must be both rich and light. Where plants are forwarded to the best advantage, a milder bed is in readiness, to which the plants are transplanted, when large enough to handle.

Cold Frames, properly arranged, are nearly as quick as hot-beds. Place a

frame covered with sash over well-prepared soil. Let it be well exposed to the sun during the day, but before its heat declines in the afternoon, cover the sash with mats, in this way a patch of warm soil will be secured, in which seeds will germinate rapidly. Airing and other care must be observed, as for hot-beds.

Preparation of the soil must be pushed as fast as its condition will allow. Use an abundance of manure, and spade or plow deeply.

Sods are most admirable for hot-bed work. Lay a good bit of pasture sod, grass side down, and cut it into pieces three inches square. Plant in the soil of these pieces seeds of such plants as do not bear transplanting kindly—cucumbers, squashes, and the whole of that family, corn, and even early potatoes. Put these sods in the hot-bed, or cold frame; the young plants will fairly revel in the fresh earth, and at transplanting time the sod can be placed out without disturbance of the roots.

Window Boxes are to be commended to those who operate on a small scale. A box four inches deep, filled with light, rich soil, and placed in a sunny kitchen window, will afford early plants for the family garden. Have a similar box in reserve for the young plants, when they need transplanting.

Cabbages and Cauliflowers that have been wintered over in cold frames may now be fully exposed.

Roots.—Dig parsnips and salsify before any growth commences.

Asparagus and Rhubarb Beds, that have been covered during the winter, may have the coarse manure removed, and the finer portions forked in.

Peas.—Sow for early crop, putting the seed at least three or four inches deep. Try the dwarfs.

Potatoes.—Plant early sorts; it is best to have some litter at hand, to draw over in case of frost.

Onions.—Potato and top onions, as well as sets, are to be put in as soon as the soil can be worked. Plant 4 or 5 inches apart, in rows a foot distant.

Seed Raising.—All roots saved to produce seed should be set out early. In warm and dry soils, this may be done this month. Soil may be drawn towards them, to protect them from frosts, which is to be removed after danger is over.

Hardy Vegetables include carrots, beets, spinach, salsify, onions, leeks, early turnips, &c.; these may be sown for the first crop whenever the soil and season will allow. Sow in rows fifteen inches apart. Cress and lettuce may be put twelve inches apart. Radishes may be sown broadcast with beets, &c., or have a bed by themselves.

FLOWER GARDEN AND LAWN.

Roads and Walks need thorough work. Drainage is essential, and solidity should

be secured by making a good bed of stones to receive the gravel.

Lawns are mostly failures in this country for want of good work beneath the surface. The drainage being secured, the soil should be sufficiently fertile to sustain a verdure for years. If one kind of seed only is sown, use June Grass, or Red Top. Henderson recommends the following mixture: 12 quarts Rhode Island Bent Grass, 4 quarts Creeping Bent Grass, 10 quarts Red Top, 3 quarts sweet-scented Vernal Grass, 2 quarts Kentucky Blue (June) Grass, 1 quart White Clover—1 bushel; and from 2 to 5 bushels to the acre, according to the soil, using more for a poor than for a rich one.

Trees.—The deciduous ones may be planted whenever it will do to plant fruit trees; give the same care as indicated for fruit trees under Orchard.

Shrubs.—Transplant the hardy kinds. Let those which were covered for the winter retain their protection until the weather becomes established.

Perennials that have been in place for three or four years will need to be lifted, and after being properly divided, reset. If there is a surplus, do not throw them away, but give to the neighbours. If nobody at hand wishes the plants, heel them in in a spare corner until some needy one comes along.

Annals may be sown—the hardy ones—in the open ground, but the tender kinds should be put in hot-beds, frames, or boxes, as directed under Kitchen Garden. Seedmen's catalogues usually designate the hardy and the tender varieties.

GREEN-HOUSE AND WINDOW PLANTS.

Propagation for a supply of plants to use for bedding purposes can now go on rapidly. Where there is a green-house and a gardener, no instructions are needed, but in the absence of these,

Saucer Propagation is the great resource of the amateur. A shallow dish of sand, always kept wet—in the condition of thin mud—allows of the rapid multiplication of most plants. We published this some years ago, and several have complained of failure. We have tried it with things of the most diverse nature, and know that it will succeed if the cuttings are sufficiently succulent, the sand is kept thoroughly wet, and the whole exposed to full light. As soon as the plants make root, they must be potted in light and rich soil.

Camellias bear all needed pruning. The only time the camellia can be forced is when it is making its growth. Rapid growth and early formed buds will give early flowers next autumn.

Plants in Cellars are to be brought forward according to the season. Exposure to light, water, and heat, will soon start them into growth.

Insects will increase with the season.

Prevention by fumigation is better than cure. Make a smoke of tobacco in the houses at least twice a week.—*American Agriculturist*.

The Orchard.

THE WAY TO SET OUT APPLE TREES.

DANIEL HARRINGTON, Tionesta, Forest county, Pennsylvania, writes:

"I would make a few remarks regarding the decay and barrenness of apple-trees. In the spring of 1840, I set out an orchard of apple-trees in the common way, by digging a small hole just large enough to hold the roots of the young tree, then putting in the tree and filling up the hole around it. The orchard was set out on a creek bottom sandy loam, and cultivated sometimes in corn and oats, with intervals of seeding down to clover and timothy. About half are now dead; of the balance, some bear every year and some every other year. I am satisfied that the reason of trees decaying and not bearing, is found in the fault of the first setting out; for instance, when young trees are removed from the nursery, they are taken out of a soil highly cultivated and manured; they are then set out in the usual way by putting the roots down in the subsoil, a soil destitute of all vegetable matter. Is there any wonder that the trees do not thrive, or that one half of them die? About six years ago a neighbor of mine set out an orchard of grafted trees from the Rochester Nursery, State of New York, as follows: He put them on high ground and dug holes three feet in diameter and two feet deep. He filled the holes with stones broken with a sledge, giving a layer one foot or eight inches deep. He then covered the stones with the soil taken from the holes, mixed with compost or well-rotted barn-yard manure, and set in the trees on this surface, and filled up around the tree with the best soil that he could get, putting the subsoil as far from the tree as possible. Those trees are the cleanest, thriftest trees, and grow the fastest of any in the neighborhood, although they have had no attention in the way of washes or manures since they were set out. The reason is, that after a heavy rain, or the melting of the snow in the spring, the water drains off through the stones, leaving the roots free from cold water; the roots, also, do not go down into the subsoil, which is destitute of all vegetable matter. I have myself set out some twenty-five apple trees in this way, which, although too young to bear, are growing very nicely. It is a great deal of extra labor to set out trees in this manner, but I believe it will pay in the end, because the trees grow so much faster, and are not so liable to be attacked by insects."—*Horticulturist*.

A FRUIT TOURNAMENT ON NEUTRAL TERRITORY.

There has been a good deal of bravado correspondence in the political papers lately respecting the relative merits of Ontarian and Nova Scotian Apples. Mr. Bluenose wishes the contest to take place in the groves of Acadie, and Mr. Kanuck would rather have it on the banks of the

St. Lawrence. Our correspondent points out a way of bringing matters to a bearing before a tribunal where there will be a fair field and no favor:—

To the Editor of the Journal of Agriculture.

DALKEITH, Feb., 1869.

Mr. Editor,—At the International Fruit and Flower Show announced to take place at Edinburgh on the 8th and 9th of September next (1869) the following prizes are offered:—For collections of fruit from British North America; (1) a medal for the finest collection of pears; also (2) for the finest collection of apples. Now I do not see what is to hinder Nova Scotia from securing both medals, if the matter is taken properly in hand. Let a meeting be called at once of all interested—appoint a committee to make the necessary arrangements, in order that a suitable display may be made. We may have opposition from some of the other provinces; therefore it behoves us to take time by the forelock. And I hope the fruit growers will unite together and lend a helping hand. They have done well at former shows in Britain, and I trust they will not be found wanting at the Edinburgh show. The credit of the province is at stake as a fruit producing country, and it is required of them, both for their own interests and those of the province, to make a good display. And here is a chance for the Legislature to do something, in order to attract Immigration to our shores—a few pounds granted to defray the expenses incurred, in getting up a good representation of fruit to send to the International, would go far to advance the object in question. For when our fine fruit is placed side by side with that of Britain, France, Germany and Italy, visions of ice, fogs, Red Indians, &c., will be quickly dispelled, and inquiry naturally awakened concerning Nova Scotia,—of which place, I am sorry to say, most people on this side of the water, are in lamentable ignorance. Trusting that something will be done at once, in regard to this important subject,

Yours, &c.,

HALLIGONIAN.

FRUIT GARDEN.—The success in raising fruit depends upon care, as well as other circumstances and essentials; without care, fine fruit can not be expected. Insect and other enemies are to be looked after and destroyed; pruning and other culture are to be given.

All neglected currants, gooseberries, and grape-vines, and dwarf fruit-trees, may be pruned during a mild spell before the sap has begun to flow or start.

Strawberry beds, grape-vines, and other small fruits, not covered before, may yet have a covering of evergreen boughs given, and avoid the damage that would result from changes of temperature, freezing and thawing.

Prepare posts and other material for trellises that may be needed for grape-vines, &c., the coming spring.

Spread manure around the trees, currant and other bushes, and plants, in the fruit garden, that were neglected in the fall.

ORCHARD AND NURSERY.—Trees injured by ice or snow should be looked after often, and broken limbs removed, and as soon as the frost is out of the wood pare the wound smooth and clean with a sharp knife, and if a large one, cover it with grafting-wax,

shellac varnish, or clay and cow manure mixed, and bound on with a cloth, &c.

Go over the orchard and nursery frequently, to see that trees are not girdled or barked by mice or rabbits. If any are found thus injured, attend to them at once, if to do nothing more than pile snow and tread it solid over the wound. If attended to while the wounds are fresh, little fear need be entertained that the trees can not be saved by some of the various ways of treatment to be resorted to in such cases, such as bridging the wound with scions set in the bark—one end being inserted below and the other above the wound; covering the wound with a thick varnish of shellac dissolved in alcohol; covering with the clay and cow manure mixture bound on; or even banking it over with soil well treading down, &c., all of which ways have proved successful when thoroughly performed and attended to in season.

All trees having loose outer bark, moss, &c., on their trunks and branches, would be benefited by scraping, and washing with a strong solution of soap and water, thus destroying insects and their hiding-places.

The eggs of the caterpillar will show, encircling small twigs, the varnish which covers them glistening, and showing quite plainly on a pleasant day; they should be removed and burned, thus saving the injury they would do if left to hatch.

The canker-worm moths will begin to come out as soon as the ground thaws, and seek to ascend the trees to deposit their eggs. The means of protection is "eternal vigilance." Many inventions and protectors are recommended, but none are entirely effectual. About as good as any is, to wind around the body several turns of straw rope, and place old rags or like in the crotches, and examine these frequently, seeking the moths and destroying them as discovered.—*Horticulturist*.

THE LONDON PIPPIN APPLE.—The original London Pippin tree in Virginia is known to have borne every year for the past eighty years, from forty-five to seventy-five bushels of apples each year, and it was known eighty years ago to have been an old tree. So it has, without a doubt, borne for one hundred years an average of fifty bushels per year. The fruit is of first rate quality and over the average size of apples. The tree two years ago was as sound as could be imagined. It was about forty-five feet high and forty-five feet in the spread of its branches.—*Colonial Farmer*.

Poultry Yard.

POULTRY MANAGEMENT IN MARCH.

The present is a critical season with all kinds of poultry. If well fed and watched, a great stock of eggs may usually be secured. Hens that steal their nests will usually become broody as soon as they have a dozen or fifteen eggs. So, if half a dozen hens lay in one nest, the nest full of eggs tends to stop the laying, and promote a desire to sit. The same is true of turkeys and ducks; perhaps also of geese, but in a less degree. Ducks ought to be shut up every night, and not let out before eight or nine o'clock in the morning, or not until each

duck has laid an egg; thus they will keep on laying until July. Fowls must not be allowed to sit in exposed places; and if broods come off, they will die of cold and exposure, or fall victims to vermin, unless very carefully protected, and kept in warm, dry places. Old empty hay bays are very favorable for this purpose.—*American Agriculturist*.

POULTRY PICKINGS.

Halifax Co., March, 1869.

"Nobody really knows the earliest date of the domesticity of fowls. Some suppose it must have been coeval with the keeping of sheep by Abel, which view has a reasonable amount of probability, as the oldest son of Japhet was called Gomer, signifying a Cock. When the Romans invaded Britain, they found the fowl and goose domesticated, but these, as also the hare, were forbidden as food; they are one of man's oldest and most important acquisitions," Saunders—and as such we rejoice at having them handed down from generation to generation, and from year to year improving the breed, until we have them now in our day almost perfect. If the bird is forced to a large size, we lose the delicate flavor of the fowl, which is so essential on the dinner table; as well as size, we require flavour, and white flesh. It is to be regretted that so much consideration at Poultry Shows is bestowed upon the plumage of the bird. Fowls ought to be reared for the people's food, and not for their fancy feathers. A lady goes to the market to buy a pair of large fat white chickens for her table, but she rarely gets what she desires. "Brahma Pootras are highly esteemed in England, and are there given a very high place among useful poultry. They are large, and put on flesh readily; they are good layers and good sitters, and good mothers; they are also very hardy, apt at keeping themselves in good condition, and under the unfavorable circumstances of dirty weather, keep up a clean, tidy, appearance better than any other kind. The chickens are hardy and easy to rear, they are more clever in their treatment of themselves when they are sick than other fowls; when they get out of order, they will fast until eating is no longer injurious. They come true to their points, generation after generation; the pea-comb is very peculiar, their habits are very unlike the Cochins. Although docile, they are much less inert, they lay a large number of eggs and sit less frequently; many hens wish only to sit once a year, a few oftener than that, perhaps twice or even three times in rare instances, but never at the end of each small batch of eggs as the Cochins do;" the color of the Brahma eggs is chocolate.

The Dorking has delicate white flesh, and symmetrical shape and equal distribution of fat, which makes the Dorking as it at present exists, to be the bird par excellence of our table poultry; there are several varieties but only two distinct kinds—the white and the colored. All Dorkings are delicate until full feathered, then they are considered as hardy as other fowl. Dorkings are, perhaps, more liable to roup than other fowls; it attacks them when three parts grown; they also suffer from slight attacks of cold and hoarseness, 'The Henwife.'

Fowls require feeding only twice a day when they run about, when shut up, three times; one of these meals should be soft, any kind of grain mixed with bran, potatoes, turnips, &c., and in the laying season, a little cayenne pepper may be added. It is remarkable how well the hens lay when cayenne is added to their food.

The domestic Fowl and domestic Cat, originally came from Asia, and have followed women all over the world.

L. L.

NOVA SCOTIA DOG, PIGEON, AND POULTRY SOCIETY.

At the Annual Meeting of the above Society, held on Friday, 12th March, Captain L'Estrange, R. A., President, in the chair, the Treasurer submitted his accounts, which were examined and found correct, this being the balance sheet for the past year:—

1869.	Dr.	
To sundries, per vouchers.....		\$201 39½
J. H. Duvar, as per receipt.....		100 00
Amount paid in prizes, per list.....		192 00
Balance in hand of Treasurer to date..		53 36
		<hr/>
		\$548 75½
		<hr/>
	Cr.	
By cash from M. G. Black.....		\$12 50
Am't. from entrance fees at Exhibition.		179 52
Cash for entries.....		51 75
Subscriptions.....		205 37½
Sundries.....		99 61
		<hr/>
		\$548 75½

Showing a balance of \$55.36 in favor of the Society.

The following were then appointed a Committee for the ensuing year, any five of whom, including officers, to form a quorum:—

President—Capt. L'Estrange, R. A.
Vice-Pres. and Treas.—W. J. Lewis.
Committee—M. G. Black, John Duffus, John T. Compton, Wm. Esson, C. C. Vaux, M. B. Almon, Jr., D. H. Starr, George Drillio, Professor Lawson, John Hosterman, Henry Piers, F. Blaiklock, Andrew Downs, Joseph Belcher, John E. Cabot, George Hill.

JOHN G. MCKIE,
Secretary.

Natural History.

THE MUSK DEER.

BY A LADY SUBSCRIBER.

Concluded.

In searching for further information on the subject of the Musk, I have found that Sir Charles Linné has it described in the first volume of his "System of Nature," (the English edition is dated 1806.) His description is interesting, as it accords more than any other with Mountaineer's account of the Musk Deer, and he alone gives the size of the animal, which is about two and a half feet long. This is what Linné says of it: "MOSCHUS. Horns 0: fore-teeth, lower, 8: tusks, upper solitary, projecting. Moschus moschiferus. A follicle near the navel; tail short. Inhabits Alpine mountains of Asia, Tonquin, and Siberia; lives solitary among the snowy peaks of rocks; gentle timid, not easily tamed; expert in leaping, running, climbing and swimming; flesh of the young good; about 2½ feet long. Head handsome, like the roe; fur soft, smooth, lax, varying by age and season, chiefly blackish brown above, beneath hoary, the younger animals marked with streaks or spots; near the prepuce is an oval bag, flat on one side, gibbous on the other, with a small orifice; in young animals empty; in the adult containing 1-2 drachms of oily, friable, brown matter, which is the true Musk; upper jaw longer.

I beg to apologize for interrupting the reader in the middle of a pleasant ramble among the Himalayan Mountains with his friend the hunter; but having now got all the information that is written upon the Musk Deer within my reach from the mouldy old authors, (who are by the reading public voted as bores,) I will promise to be done with this subject, and bid farewell to the little Musk Deer, not indeed without being grateful for the pleasure it has afforded me during some gloomy hours of winter. I now resign my situation, as "quill driver," to our "Mutual Friend."

I have often wondered whether the stories we read of, more particularly in tales of American forest life, of men living for months together solely on the produce of the rifle, be literally true or not. I have tried when away from the villages to do a little in that way myself and get my men to do it, but am obliged to confess with but indifferent success. The men were certainly the worst hands, and insisted it was impossible to subsist long without some farinaceous addition to the stock of flesh, plentiful and varied as it generally was, consisting of musk-deer and other venison, and wild mutton, and moonalls, snow pheasants and chuckers, in the way of feathered game. When inclined to be lazy, the want of a sufficient quantity of atta or rice was on these occasions a standing, and, to their minds, an unanswerable excuse.

When on full diet the customary daily ration for each man was one seer of grain of some kind or other; and they would never own this might be considerably reduced without any privation while the larder was supplied with flesh.

With our late breakfast and a comfortable smoke afterwards, it is well on in the afternoon ere we start again. What shall we do, for we are now at the verge of the forest. That slope so thickly covered with bush rhododendrons is a very likely place to hold two or three musk-deer; but it is useless you forcing your way through it, for if there were twenty you might not see one. When fairly in the thick of it you cannot see many yards, and it is most laborious work too, stepping from stem to stem of the rhododendrons, treading on that to force it down, lifting this up to pass under, and clambering over another which admits of neither. It is pretty hard work walking up to the knees in light sand, or uphill in deep snow, but either is child's play compared to walking through a thick bush rhododendron copse on a hill-side. You had best walk up the hill a little, and go round to that knoll above the forest, and seat yourself in a comfortable position where you can see well on both sides, and I will take the three men down below and beat up through the rhododendron. You pick out a spot and seating yourself, wait patiently for whatever may come, while we are beating the bushes and whistling and shouting below. This is hill shooting made easy. For a long time you see nothing, but at last a musk-deer steps out of the bushes below you on to the grass, and after standing a little while, as if listening to the row we are making below, it comes right up towards you, standing now and then, and sometimes looking back. Be quite still, and if you want to have a very close shot it will come within twenty paces of you. You cannot miss it then, and when we get up to your post we congratulate you on having bagged No. 3. Others may have gone out in some other direction unseen either by us or you, for one gun and four beaters cannot expect much.

It is time now for us to think of turning our faces towards home. We have four miles to walk down the hill without a path, and if we don't mind we shall be in the dark,—no very pleasant thing in the hills, though it is almost worth while trying it for once, if only to realize what queer hill-sides a cragsman may safely clamber up or down when he cannot see ten yards before him—places which fifteen men out of twenty would not venture over in broad daylight. There is no time to look for musk-deer on our way home, and what with walking so much faster, and being less careful in looking over the ground which is the natural consequence, one seldom gets many shots going down hill; so you must be content with the sport you have had—a fair average of musk-deer shooting in the Ganguotree forests twenty years ago. Nothing particular, as four, five, or half-a-dozen, was no very unusual bag, with now and then a hurrell or two, or a brown bear. The sun is getting very low, but no fear, we shall get over the ground fast enough down hill, only you must be careful on the slippery grass, and still more slippery dry fir leaves, or your head will be where your heels only ought to be before you can say lemons. Our men you see have to take off their shoes before they can walk at all. Ours fortunately are well nailed, and give firmer footing.

We have been so taken up with our sport, that the scenery has been little noticed. Yet we might wander a long way without finding grander views of nature's handiwork. The play of light and shadow in the still silent forest, the varied tints of the autumnal foliage, the bright yellow of the birch, the brown and red and purple of other leaf-shedding trees, the dark black green of the morinda pine, and lighter shades of the other evergreens, with rock and crag to fill up the picture, and the white untrodden snowy peaks towering above all. If any great misfortune overtake me, I cannot think of a better composing draught than a ramble amongst the great works of nature. It is there we best realize the littleness of mere worldly matters. But I must hasten with you down the hill, leaving you to think of these things on the way. We will just take one last look at these glorious mountains:—

White the golden hues of sunset
Fade in twilight cold and grey,
As our youth's fond dreams still vanish
'Neath the world's cold frown away:

See, the roseate tints still linger
On those virgin peaks of snow
The last warm beams their forms caressing,
While the night steals on below.

Here we are at your tent, just as it gets dark. At and after supper we talk of the day's sport, and the habits of the musk-deer. You have seen they were not then at all shy, or wary, or very much afraid of mankind, and could not fail to notice the habit of voiding their droppings in one spot till these formed large heaps. My own experience only adds to what you have observed. It was nothing unusual to fire half-a-dozen shots at one before it was killed or went off at last unscathed.

A few hundred yards from our bivouac was a small patch of forest, stunted pines and birch, with an undergrowth of bushes. Amongst the latter were some black currants, the fruit of which was ripe. I had been picking the ripest, sauntering from bush to bush, and was about proceeding on; when within thirty yards, what should I see but a musk-deer seated quietly on its form, and, as they always seem to be when so discovered, apparently intently looking at me. I stood for some moments returning the compliment, for the rifle was having a rest too, and was reposing against the trunk of an old pine tree at our bivouac. The musk-deer did not seem inclined to move, so I drew gently backward, and, having got out of sight, hastened home for the rifle. On my return, there was the musk-deer just as before, and it moved not till the fatal bullet passed through its body, and it rolled over to move no more. I have sometimes thought in such cases the deer were fast asleep, but they have their eyes wide open, and it is more probable this strange disregard of the vicinity of a human being proceeded from sheer reluctance to get up. At another time I came across one under somewhat similar circumstances, at least so far similar that I had no weapon and had to go and fetch the rifle. In this case the deer jumped up and stood looking at me, and I took off my hat and placed it on my walking-stick planted in the ground for the musk-deer to look at till my return. The charm was successful, for when I got back, hat and stick and musk-deer were just as I had left them.

No wonder in those days the bag at the

end of the season contained a goodly number of musk-pods, and the sport or work, whichever you like to call it, was both pleasant and profitable; but such days will probably never come again—certainly not for me, and it is not likely for any one else. Suppose you have wandered into the neighbourhood, and are tempted to have a day's musk-deer hunting. Some native friend may have asked you to bring him back from your mountain trip a pod of the much-prized perfume, or you may wish to send one home, or you want to kill one musk-deer to complete the collection of hill mammalia which form the trophies of your Himalayan sport. Any way you determine to set at naught the fiat of your shikaree and the villagers that there is little chance of getting a musk-deer, and sally forth into the forest. The first great change you observe is this. The musk-deer no longer hiss. You will not in your day's ramble once hear the characteristic sound, and probably would not do so if you spent a whole month in the forest. Another is, you never now meet with large heaps of droppings, respectable lumps of a bushel or so, the accumulation of years perhaps of a single animal which has constantly returned to the one spot to void its excrement, or possibly due to the joint work of several individuals. You see droppings of course—indeed you will not walk over any great extent of ground without seeing some, but it is in small quantities in one place like that of most other animals. You will very likely in some sheltered spot come across one of the old heaps of the by-gone days, and probably see a few fresh droppings on it, as if the animals could not entirely forget their old instincts. You may, during the day, get occasional glimpses of a musk-deer going off through the bushes, and very likely your attendant shikaree, with sharper eyes than your own, will once or twice cry out "sahib, sahib," and point to where he saw one steal off; but you will be fortunate if you get a single decent shot, and doubly so if you bring a musk-deer home. There are many in the forest no doubt, but what with guns—of which the pulharries have lots now—and snares, and wild dogs, their numbers have very much diminished, and they have become so shy that the only sure way to get one is to seat yourself on some favorable spot and let a lot of men beat through the forest towards you. A drive of this kind will generally get you a shot, but, where often resorted to, the musk-deer seem to become aware of its meaning, and after being roused will turn and break through the line of beaters even should they have to bound almost over the heads of the men.

This change in the habits of the musk-deer I have thought worthy of recording. To the lovers of the greenwood and the naturalist it will not be uninteresting. With gregarious animals, as wild goats or sheep or antelopes, it would not be so strange, as the individuals of a flock or herd have no doubt means of impressing on each other the signs of danger; and a change in habits or character might be easily transmitted through succeeding generations. But the musk-deer is a solitary animal—solitary from its birth, for the female drops her fawn in some sequestered spot, and never goes near but to give it suck; and if, as is very often the case, she has two at a birth, they are dropped separately and at a distance from each other. Thus, if they escape their many enemies,—leopards, bears,

wild dogs, foxes, polecats, eagles, and falcons,—they grow up in solitude, and, where left to themselves, each individual lives as it were a quite separate existence. In these circumstances one would imagine that a musk-deer which may have reached adult age without seeing a human being—and this is no doubt the case with a great number of those now in the forests—would in its habits be much the same as those which were in the same place twenty or thirty years ago. That it is not so I have attempted to show; and we must conclude that the new habits, gradually acquired by the race while frequently hunted, have descended to the offspring, and proved stronger than natural instinct.

There is a North American animal which is almost forbidden to be named, such a bad character does it bear.

"A fragrant odour steals along;
At first 'tis faint, but soon how strong!
Then, as the odorous spot you fly,
A pretty creature you espy
With bushy tail above his back:
While broad clean stripes of white and black
With fair pretence attract the eye
Of 'th unsuspecting passer by.

• • • • •
Outward all grace and beauty bloom;
Within—more noisome than the tomb.
A person, once, to Skunks unknown,
Was rambling through the woods alone;
When suddenly, at bend of road,
He lights upon the Skunk's abode.
Enravis'd with the creature's charms,
He takes the sweet thing to his arms.
Returning home at evening grey
He meets a neighbour by the way:
His prize displays, and asks "is that
Not a fine sample of the Cat?"

REV. JOHN MAY, Canada.

There are fabulous stories told of the danger from the secretions of the Skunk, if it comes in contact with a person. A story is told of a man, who in killing Skunks, had the fluid deposited on his clothes, and it affected him so much, that he was very ill for weeks; others again, have to burn their dress. But the horrors of this animal are so well known that they do not need relating. To me the smell of the skunk after it is killed is not disagreeable, indeed, it has the smell of musk. From my own experience, these animals must be plentiful in Nova Scotia, and the Canadas, for in the autumn they commit great depredations upon our fowl yards, killing ducks and turkeys by wholesale. A colored gentleman, after killing a number of skunks, exclaimed, that he would not "skin one, no, not for four dollars." The value of its musk may warrant the charge of four dollars for skinning. The perfume of the skunk is identical with that of the musk-deer. The perfume of musk alone, is not an aristocratic scent, but it is the foundation of all the first class perfumes, such as Eau de Cologne, &c. It would be interesting to analyze the secretion, of the skunk, with a view to its value. Musk does not appear to have received an adequate chemical examination.

Reports of Agri. Societies.

CENTRAL CORNWALLIS AGRICULTURAL SOCIETY.

This Society was organized and meetings held on 21st and 28th December, 1868. Officers elected:—*Pres.*, Robert W. Beckwith; *Vice-Pres.*, Lawson Rockwell; *Sec'y*, Henry Lovett; *Treas.*, Jas. Bligh; *Directors*, Wm. Burgess, William E. Marsters, Jeremiah Bligh, Melbourne Merchant, John Lamont.

CONSTITUTION.

Rule 1.—That the institution shall be denominated the "Central Cornwallis Agricultural Society," and shall consist of farmers and others favourable to rural pursuits.

Rule 2.—That the Society shall be managed by a President, Vice-President, Secretary, Treasurer, and Council of Five, to be chosen annually. That the officers and Council be re-eligible.

Rule 3.—That the Society shall hold one annual meeting, on the first Tuesday in December, at the Temperance Hall, Lakeville, when officers for the ensuing year shall be chosen by ballot, and all accounts, business transactions, and reports be brought forward and finally passed.

Rule 4.—That the Society shall hold, in addition to the annual meeting, two quarterly meetings, one on the first Tuesday in April and October, for reception and discussion of essays, papers and resolutions upon subjects connected with, and for the promotion of, the objects of the Society.

Rule 5.—That the President shall preside at all meetings of the Society, keep strict order, regulate discussions, state and put questions, and shall not permit or allow any improper remarks of a personal character and foreign to the subject under discussion, sign orders, draw on the Treasurer, call special meetings by a requisition of five members, and perform such other duties as belong to his office. In his absence the Vice-President shall take the chair; and if both are absent, the Society shall choose a chairman *pro tem*.

Rule 6.—That the Secretary shall attend all meetings of the Society, keep a correct record of all the transactions, collect all monies due and pay the same over to the Treasurer, and prepare and submit an annual report of the proceedings of the Society, conduct all correspondence, and perform such other duties as shall be required of him.

Rule 7.—That the Treasurer shall receive all monies paid him by the Secretary and pay them over by an order from the President—he shall also annually submit an account and report of his proceedings.

Rule 8.—That the duty of council shall

he to devise and recommend to the society from time to time such improvements in the practice of Agriculture and Horticulture, and the introduction of improved breeds of cattle, sheep, horses and swine, &c., as they may deem advisable for the promotion of the objects of the Society, and shall endeavour to secure, at the regular meetings, the reading of essays, papers, &c., and prepare a list of questions for discussion, and assist the Secretary to prepare his report.

Rule 9.—Any person may become a member of this Society by paying to the Secretary the annual fee, and signing the declaration which shall constitute him a member in good standing, he being a resident of King's County.

Rule 10.—That every person admitted a member must sign the declaration, and pay to the Secretary the sum of Two Dollars in advance.

Rule 11.—That no member shall be entitled to any of the privileges of the Society, neither shall he be allowed to vote, until all demands against him are paid.

Rule 12.—No discussion on political or religious subjects shall be permitted at any meeting of the Society.

Rule 13.—Eight members shall constitute a quorum to transact business at any of the meetings.

Rule 14.—At any Annual Meeting of the Society the foregoing rules may be altered or amended, or the Society may pass such Bye-Laws and Rules of Order as they may think advisable, by a vote of two-thirds of the members present.

BYE-LAWS.

1st. The hour of meeting for the Annual meetings shall be six o'clock, P. M., and Quarterly meetings at two o'clock, P. M.

2nd. The order of business shall be as follows:—

- 1st. Reading minutes of last meeting.
- 2nd. Collection of dues.
- 3rd. Report of Secretary.
- 4th. " Council.
- 5th. " Finance Committee.
- 6th. " Treasurer.
- 7th. " Special Committee.
- 8th. Essays, &c.
- 9th. Discussion of questions.
- 10th. Miscellaneous business.
- 11th. Election of officers.

3rd. No member shall speak more than twice upon any subject, nor more than ten minutes at each time, unless to explain, or by permission of the President.

4th. All resolutions must be submitted to the Secretary in writing, signed by the person moving the same.

SHUBENACADIE AGRICULTURAL SOCIETY.

At a meeting of the above Society held Dec. 1st, 1868, the President in the chair.

Managing Committees' Report read. Colonel Laurie, Dr. McLean and William Blake appointed to audit the accounts. Moved and passed that the Managing Committees' Report be received and approved. The Auditing Committees' Report was received and approved, which is as follows:—

We your committee beg leave to report as follows:—

1st. We find the Treasurer has received pay of 40 members.....	\$40 00	
2nd. We find the Treasurer has paid Committee.....	\$40 00	40 00
Further we find the Society owed the Managing Committee at commencement of year.....	124 00	
By keeping of bulls for the year.....	113 00	
" sheep ".....	30 50	
By other unavoidable expenses.....	17 50	
By Provincial grant for '67 paid to Central Board.....	30 00	
		316 21

Further we find the committee has received the following sums:—

To cash from Treasurer.....	\$40 00
" amount for rain service.....	32 75
" " bull ".....	43 30
" " sheep sold in Halifax.....	25 15
" Exhibition prizes, after paying expenses.....	27 00
" am't of Provincial grant for '67.....	30 00
	\$198 70

Due committee..... 117 51

Further we find the Society owns the following stock:—

1 Durham bull, value.....	\$80 00
1 Devon bull, value.....	60 00
2 Shropshire rams, worth.....	50 00
1 Leicester ".....	10 00
1 " ewe, ".....	10 00

Society reorganized by 39 members that were present, each paying \$1 for the present or incoming year, and appointing the following officers to manage the Society:—F. R. Parker, *Pres.*; Dr. McLean, *Vice Pres.*; David Moore, *Secy.*; Samuel Traine, *Treas.* Managing Committee—F. R. Parker, Wm. Wardrop, David Moore, Wm. Blake, George Denis.

Moved and passed that the managers of this society watch and prevent, if possible, the withholding of the present Provincial grant, for the encouragement of Agriculture, from this Province, if the attempt should be made by our legislators.

Moved and passed, that this Society record their approval of, and in the manner in which the last Agricultural Exhibition was conducted; and their belief in large benefits being derived by, and through, Provincial Exhibitions, and that they should be held at least every three years.

Moved and passed, that Colonel Laurie be recommended as a proper person to fill any vacancy in the Central Board.

Further, I would say, regarding the produce of the farms within the bounds of our Society, Hay has been rather below an average yield, and potatoes likewise, but of good quality. Carrots and turnips good. Barley rather poor. Wheat that was early sowed filled well, escaped the weevil, and was a fair crop.

DAVID MOORE, *Secy.*

THE WEYMOUTH AGRICULTURAL SOCIETY.

The annual meeting of this Society was held in Temperance Hall on Tuesday, Dec. 1st, 1868, when the officers of the ensuing year were appointed:—William Dahlgreen,

Pres.: John S. Jones, *Vice Pres.*: Frederick Sorenson, *Secy.*: Sterns Jones, Esq., *Treas.* Directors—A. D. Hoyt, Esq., Thos. McBride, Jeremiah Dahlgreen, Jno Hankerson, Stephen Jones.

The accounts of the past year were then placed before the meeting, and examined, and found correct.

Cash on hand \$38 47. Debts due Society \$63 46. Available funds being \$101 93.

The six bushels of wheat which we obtained at Halifax gave great encouragement to farmers to try it again, although a good part of it was not sown until late, on account of the season being so wet; the yield was good, and some of it looked as well as any wheat that I have seen in the State of Minnesota, which is one of the best wheat growing states. It was not injured much by rust or weevil. Some of it that was raised by Mr. William Payson and Mr. Dittuss Dunbar, was heavier and larger than the seed imported. The twenty bushels of two-rowed barley imported from England, through Mr. Alfred Saunders, of Halifax, gave great satisfaction. It is called for from all parts of the county. It has to be sown two weeks earlier than our common kind. The want of a change of seed barley has been felt here for a long time, and I think that the benefit of this importation will be the improvement of the barley crop for a number of years. And as barley is the chief grain sown here, the benefit will be great. The Alsylke clover was sowed by some of the members, and it appears to have done well. Our Devon and Ayrshire bulls are very much liked. The breed of stock will be much improved thereby. Our hay crop was about an average crop. Oats and barley light. Buckwheat good. Turnips and other vegetables did well. All kinds of fruit were very scarce. Potatoes very poor, but better than last year. The Secretary of this Society, reading Mr. Bustin's remarks on the potato disease in the *Journal of Agriculture* of last March and April, was very much interested in the subject, tried the experiment, but could not see any benefit by the wire, as the potatoes so treated were affected by disease, as soon and as bad as others not so treated.

FREDERICK SORENSON, *Secy.*

PROCEEDINGS OF THE YARMOUTH COUNTY SOCIETY.

Yarmouth, 2nd Feb., 1869.

Quarterly Meeting of County Agricultural Society; a small attendance—the President in the chair—minutes of last meeting read and approved.

The January No. of the N. S. Journal of Agriculture not being yet received, the Provincial Grant to the Society for 1868, could not be precisely stated, it might be assumed, however, at \$180.00 Deduct grant to Exhibiton,.... 50.00

	\$130.00
Cash in hand.....	110 00
Subscriptions for 1869, not less than.....	300 00

Available fund for 1869..... \$540.00

Voted that an Exhibition be held about the middle of October, to which \$200.00

should be allotted for premiums, of three grades, the details to be arranged at the next quarterly meeting.

Mr. Archibald remarked at length upon the importance of procuring improved seed, as one of the most essential functions of the Society, gave his experience in the cultivation of many varieties of potatoes, has now 24 varieties, and intends to grow from 30 to 40 the coming season; considered our soil and climate well adapted to the prosecution of all the branches of agriculture, while the town affords a market, at present not equalled in British America, for the sale of all the products of the farm.

Voted to procure for distribution to members at cost:—

1 barrel Early Rose Potatoes, to be divided in not over 5 lb. lots.

1 barrel Owen Potatoes, (a New-Brunswick seedling.)

1 barrel Norway Oats.

25 bushels 2 Rowed Barley.

Voted that it be left with the Committee of Management to purchase seed stock, as they may consider advisable, with the amount of funds on hand. While our horses need improvement more than our neat stock, but little can be done in this direction, until our funds are largely increased, a single horse, of any good stock, would cost more than the whole funds of the Society.

CHARLES E. BROWN, Sec'y.

ARABIAN FOOD.

Mr. J. H. Woolrich, English Pharmacy, Halifax, sent to our office half a dozen tins of his "Arabian Food," also, samples of Medicine for Colic, &c., in horses; Liniment for sores, &c. We are glad to see that Mr. Woolrich is making a speciality of reliable Horse Medicines, than which nothing is more required. The "Arabian Food" is a more agreeable and neater preparation than the ordinary Condition Powders. At this season of the year horses require more than usual attention, and our farmers cannot do better than call at Mr. Woolrich's, and lay in a supply of these so-called Arabian Horse Medicines.—Some of the tins sent to us have been handed to farmers who have sick horses, so that we may be able to give the results on a future occasion.

TO CORRESPONDENTS.

AGRICULTURAL SOCIETIES.—Reports have been received from various Agricultural Societies, which will be published so soon as we can find room for them.

CATTLE DOCTOR.—We received an application some time ago for information as to the most useful book on cattle diseases and treatment. Gamgee's "Vete-

rinarian's Vade Mecum," will probably be more suitable to our correspondent than any other. It is published in Edinburgh by Jack, price 10s. 6d. stg. We have not seen the book, but it is highly spoken of by the English press.

Communications for insertion in the *Journal of Agriculture*, exchanges, &c., should be addressed to Professor Lawson, Dalhousie College, Halifax, N. S.

BE HONEST YOURSELF.

Be honest, be honest, be trusty and true,
Though others gang gleyd, that is naething to you;
There are some ragged crows that will never do well;
Ne'er be guided by them, but be honest yourself.

Be honest yourself, and ne'er let greed o' gain
Mak ye put oot your hand to tak what's no your ain,
If ye do, then to ruin you'll drive on pell-mell,
Whene'er you gie cwre being honest yourself.

Riches got in this way never last very lang—
They come wi' the wind, wi' the water they gang,
And you canna expect that you'll e'er prosper well,
Unless you are upright and honest yourself.

Be honest, though wealth never fa's to your share,
It's nae sin nor nae crime in man to be puir;
And tho' humble and lowly the cot where you dwell,
You'll meet wi' respect if you're honest yourself.

Be honest, and strive hard to do what is right—
Ne'er do naething by day you can't stand by night;
Then your sleep will be pleasant, and sound as a bell,
When you ken a' the fine you are honest yourself.

Be honest and faithfu', be truthfu' and wise—
The mean, petty doings o' tricksters despise;
Keep your conscience as pure as a clear runnin' well,
And aye aboon a' things be honest yourself.

PERSONAL.—Soon as you get out of bed in the morning, wash your face, hands, neck and breast; then, into the same basin of water put both feet, at once, for about a minute, rubbing them briskly all the time; then, with the towel, which has been dampened by wiping the face, feet, &c., wipe the whole body well, fast and hard, mouth shut, breast projecting. Let the whole thing be done within five minutes.

At night, when you go to bed, and whenever you get out of bed, during the night, or when you find yourself wakeful or restless, spend from two to five minutes in rubbing the whole body, with your hands, as far as you can reach in every direction. This has a tendency to preserve that softness and mobility of skin which is essential to health, and which too frequent washings will always destroy.—*Hall's Journal of Health.*

FEEDING BEES.—Mr. Langstroth recommends as excellent bee food, "a mixture of three pounds of honey, two of brown sugar, and one of water." After you commence feeding, continue it without interruption until through, as it ought to be finished, after being commenced, as soon as possible. Make holes through the centre of the fullest honeycombs, which ought to be in the centre of the hive so that the bees will have winter passages to their food without being obliged to go over the edges of their combs.

ADVERTISEMENTS!

FANCY POULTRY AND EGGS For Sale.

Brahma Pootra, Black Spanish, Algerine Houdan, Grey Dorking, Gold and Silver Pencilled and Black Hamburg and

GAME FOWLS.

—ALSO—

EGGS for hatching of the above and other choice Fowls and DUCKS.
Apply, post paid, Box 116, Post Office, Halifax, March, 1869.

Western Halifax Agricultural Society.

FOR SALE:

The Society's celebrated thorough-bred Durham Bull "LOBO LAD."
"LOBO LAD" was imported from Canada two years ago.

PENNING.—"Lobo Lad," red and white, calved 9th November, 1865; bred by Thomas Douglas, Lobo, Co. Middlesex, C. W.; entered in Upper Canada Stock Register, No. [2008]; got by Baron Renfrew, [1227]

Dam—Miss Maude, [353], by Belted Will the 6th, [68], bought from John Snell.

g. d. Red Rose, (265), by Young Briton, (275)

g. g. d. Lady Jane, (importer) by Sir Walter (2639.)

g. g. g. d.—by a son of W. Booth's Jerry, (4097.)

g. g. g. g. d. by Young Star, (5319.)

g. g. g. g. g. d. by Roseberry, (567.)

g. g. g. g. g. d. by a son of Comet, (155), &c.

For further information, apply to the sub-Committee, Messrs. Joseph J. Northup, Anderson, and Lawson. March, 1869.

ALFRED SAUNDERS,

(Late Secretary Royal Jersey Agricultural and Horticultural Society. Formerly of the Royal Botanic Gardens, Kew, London),

SEEDSMAN,

168 Argyle St., opposite J. Northup & Sons, HALIFAX, N. S.

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