

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Cover title missing/
Le titre de couverture manque

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/
Transparence

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Includes index(es)/
Comprend un (des) index

Title on header taken from: /
Le titre de l'en-tête provient:

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

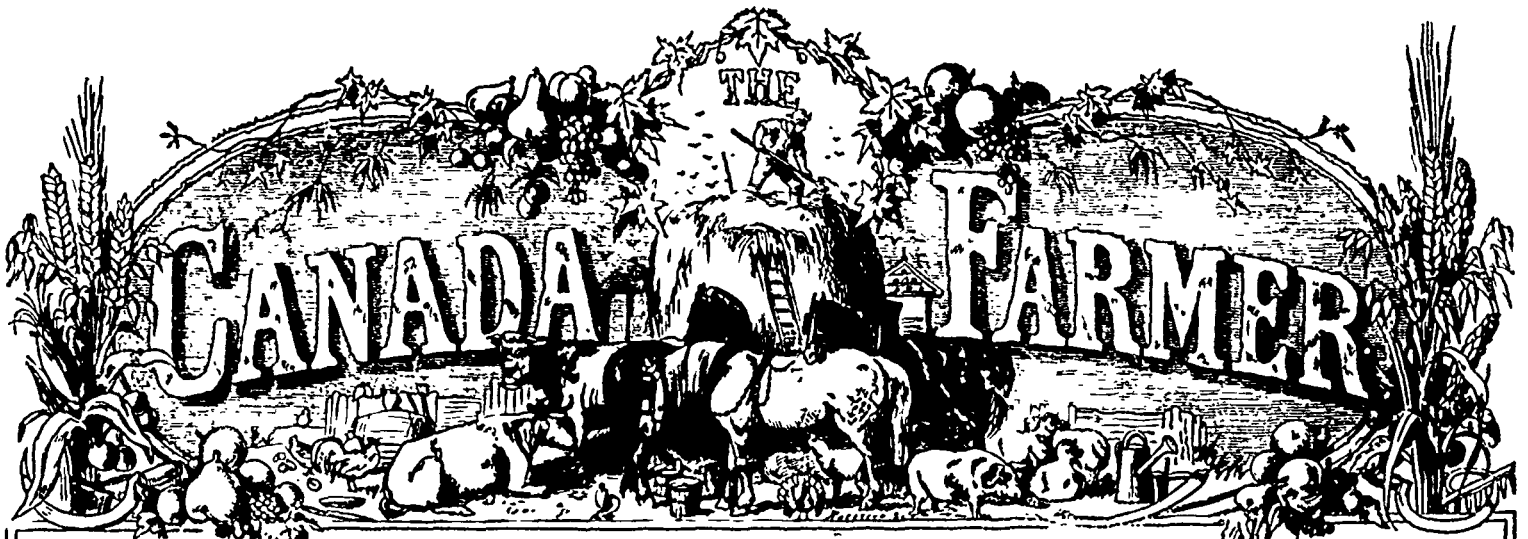
Masthead/
Générique (périodiques) de la livraison

Additional comments: /
Commentaires supplémentaires:

Wrinkled pages may film slightly out of focus.

This item is filmed at the reduction ratio checked below /
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
										✓	



Vol. II. No. 9.

TORONTO, UPPER CANADA, MAY 1, 1865.

POSTAGE FREE.

The Field.

Work for the Month of May.

THE chief operations this month, are finishing the sowing of spring crops, and planting hoed crops. Flax should be sown as early this month as the weather will permit. Grass and clover seeds may still be sown on grain fields, and bare spots in meadows. Rolling and top-dressing with fine manure are recommended wherever practicable. They will greatly promote growth. Oats do best sown in April, but for seeding down to grass, they may be put in early this month, and if not likely to mature may be cut and cured like hay. Thus treated, they make excellent fodder. Oats and vetches mixed make good green feed during the summer, and cure well for winter use. Indian corn sown thick broad-cast, makes the best green forage for summer soiling, but it ought not to be sown until the last of May, or first of June, to avoid risk of frost. We recommend our readers to try this, and also by all means to plant a patch of corn in the usual way for a crop of ears. This cereal is too much neglected in Canada. A few pumpkin seeds should be planted here and there among the corn. Sorghum should be planted about the same time as corn. We hope many Canadian farmers will try the experiment of growing a little sorghum for a home supply of syrup. Carrots and mangolds should be sown early in this month, if they are not already in the ground. Potatoes ought to be all planted by the end of May. As a general rule, the earlier they are in the better, provided risk from frost is avoided. To raise potatoes profitably, hand-hoeing should be avoided as much as possible.—Plough out drills about three feet apart, and drop the pieces a foot and a half in the rows. Cover with the plough, or with a cultivator having the middle tooth out. In about a fortnight, or just before the potatoes come up, a careful harrowing lengthwise may be given, which will be as good as one hand-hoeing. Ground should be in course of preparation for turnips and buckwheat, though these are not to be sown for some time to come. Beans should be planted this month. The white bush variety is the best for family use. Dairy operations will begin to demand attention this month. A clean, cool, well-ventilated milk-room should if possible be provided. In the orchard, grafting should be attended to this month. It is a simple operation, and the farmer need not wait till he can afford to employ a professional grafter. Try your hand on a few trees, and give over growing natural fruit, some of which is sour enough to give even pigs the colic. This will be a busy month in the kitchen and flower garden. Seeds of all kinds must now be sown, as the state of the soil and weather permit. Fruit trees, shrubs, shade-trees, &c., may still be planted out with success. May is the best

time for lifting evergreens. With care they may be successfully planted from the woods and swamps, but they are more sure to grow, and will come on much more quickly, if transplanted from the nursery. Active operations will begin this month in the apiary. Weak stocks may require a little feeding still, but it will not be long before white clover, fruit tree blossoms, early spring flowers, &c. will furnish abundance of food. Toward the end of the month there may be a disposition to swarm in the case of strong stocks, but generally speaking, there is no danger of this occurring until June.

Grass Lands.

THERE is no subject on the farm more neglected, or less understood, or more important, than the grass or pasture of the farm. Grass will grow anywhere; let the land alone, and, finally, grass of one kind or another covers the surface; but such pasture is neither the best nor the most profitable, but like everything else that costs little, it seems to be preferred by too many farmers in Canada. To the ordinary, or old class of Canadian and American farmers, time is nothing, and space of ground is nothing, but the cost of a few dollars is most jealously looked at and guarded against. The common Canadian pasture costs nothing but time and space, and is therefore preferred over that which is many times more valuable, and which costs labour and money.

What is the result of this? Where such pasture is kept for hay, it yields about $\frac{1}{2}$ of a ton per acre, when the crop is good, and from $\frac{1}{4}$ to $\frac{1}{2}$ a ton, when it is bad. The after-grass is poor in proportion—it will not carry half the stock it ought, yet as much stock is put on it as it ought to carry if good—it is cut too close, then usually eaten down to the bare roots, immediately after laying, and again before winter. The timothy—where there is timothy—is killed; the clover heart is bruised and trampled to death, and often so weakened as to freeze out in winter, and none but the natural grasses will stand the bad usage the meadow has received. Now, bare fall pastures produce a poor spring crop; the meadow, having lost all artificial grasses, yields merely wild hay, fit only for cows, and when sold at market produces the lowest possible price. At last even Canadian patience gives out, and the ground is broken up, and, from rest, and the assistance of a summer fallow, and, possibly, some manure, produces a tolerable crop of wheat, but the same evil is perpetrated on some other portion of the farm. Now, what is the cure for this? There is but one: either to raise timothy and clover, and never let the land remain in pasture for more than one year; or, if you cling to the old meadows, thoroughly manure them; take care that the hay is not cut too close to the ground, never allowing the cattle to feed down close, and take care that a plentiful supply of fog or withered grass is allowed

to cover the surface during the winter, and nurse the coming crop in the spring.

It is a well known fact that if timothy grass is cut before the bulbs are formed, or even then, if cut below the second joint, above the root or bulb, or allowed to be bitten down, the timothy is destroyed. Timothy and clover do not ripen together—to secure the best portion of the clover you ruin the timothy—and if you leave the crop uncut till the timothy is ready, you lose the best part of the clover. The best English agriculturists meet this by sowing clover and rye grass together. We should be inclined to recommend a mixture of clover and orchard grass, but, perhaps, clover alone, where it can be got to take sufficiently well, yields the heaviest crop. We have always been of opinion that timothy should be grown alone, cut late, and not pastured, or not closely pastured. If grown for seed, a remunerative return is obtained, and threshed timothy is certainly far preferable to straw. Our system of farming does not yield enough manure to afford it for grass lands; but, really, you can manure grass lands more cheaply with their own produce than with manure carried out of a barn-yard. All the grasses yield within themselves the best manure for themselves, and the aftermath is really the cheapest and best manure which can be had. Cut the hay crop; fasten up the field; let the aftermath rot on the ground; apply plaster in the spring, and the next hay crop will be double what it was the previous year; repeat the operation, and the fertility of the meadow increases year by year, until the crop is treble to what we now obtain. Do you want evidence of these facts? There is plenty before your eyes on every farm. Who has not some neglected corner of field, or orchard, or garden, where the cattle cannot get, and where the grass rots down year after year? Look at the crop of grass there and compare it with your old bitten down pastures—the produce is four times as much as on the pasture, the grass is rank and rich in appearance, and, if cut for hay, would yield at the rate of at least two tons per acre. Yes, but—farmers will say—who is going to let pasture go to waste while their cattle want grass? Well, the question is—shall they want grass this year, or will you go without hay the next? You must either manure with the produce of the barn-yard, or you must manure with the produce of the meadow itself, or you must go without grass, except in the homeopathic doses you now get from old pastures. You cannot spare the barn-yard manure from the grain crop, and, therefore, either of the other courses are open to you, and that generally adopted is to go with poor pasture in the fall and a trumpety hay crop the following year. Try our plan with one acre, or with one field, follow it up, and you will never again have to complain of short hay crop and poor pasture.

Top-dressing is said to be a profitable employment for farmers, but the ladies, devote too much time and money to it.

All about Sorghum.

We should be glad to give our readers in a few words, the sum total of all the information which has been collected, upon the subjects of seed, soil, and planting, but as all know, "circumstances alter cases," and almost anything we might write of a definite nature, would have only a limited application.

As a general summary of the matter we may say that upon the subject of seed, the spirit of the conventions is in favor of the regular Sorgo or Chinese Cane for syrup both on account of quality and comparative quantity of the product. For sugar-producing canes, the preference is given to the Imphee, particularly the *Om-see-a-na* or *Otaheitan*. The so-called early Sorgo, and early black Imphee are believed to ripen from three to four weeks sooner than the regular Sorgo or Imphee; not so productive, but quality of product in syrup not inferior. *Nee-a-zan-a* ripens at about the same time as the regular Sorgo, but may be worked to advantage earlier, before it is ripe. Quality of syrup from this cane, fair; sugar produced sometimes; cane stands up well. The Liberian, highly spoken of by all who are acquainted with it, very productive; stands up well; ripens probably a little later than the regular Sorgo; plant but three seeds in a hill of this cane as it stools out wonderfully.

Upon the subject of manure and fertilizers, much has been said in the conventions. We give as a summary the following:

On old land, strong manure, guano, super-phosphate or almost any thing may be used with advantage. Nothing better than a good clover lay or well rotted manure. On new land, already rich in organic matter and saline salts, strong stable manure is positively injurious.—Plaster, lime, leached or unleached ashes, or well rotted manure may be used with advantage. Deep tillage is highly recommended.—For our part, we would, if necessary, curtail the breadth of the field for the sake of increasing the depth. We believe half an acre subsoiled will produce more and better cane in the average of seasons, than a whole acre, when ploughed in the ordinary shallow way.

Soaking, and even sprouting the seed is an advantage in time, if the ground, when planting the seed is just right; if not bid good bye to your seed and the trouble of soaking and planting. Do not plant immediately after a shower, nor before the ground acquires a good condition.

With regard to manner of planting, some prefer to drill, others to drop in check rows.—Some advocate a distance of four feet between the rows, others think three and a half most appropriate. We think the subject should be determined by the quality of the soil. If the ground is rich and strong, it will support a heavy growth at a distance of three and a half feet between rows, and with eight to ten stalks to a hill, while weaker ground would be overburdened, and yield almost nothing. On prairies, where the two-row cultivators are generally used, we think it will pay to plant in check-rows, and work the cultivator both ways. Some advocate planting in drills and cross ploughing out. This will do when seed is abundant and cheap.

A great majority of those who write or talk upon this subject, advocate planting cane seed very shallow not more than an inch; some say half an inch, and others a quarter of an inch below the surface. If it were common for the majority to be right upon any question, we might have some confidence in its verdict upon this, but it is a conspicuous fact, that the majority is generally wrong, in its first conclusions. With reference to the planting cane seed, it is not probable that this pompous tribunal that dictates so confidently, ever measured the depth of its seed below the surface. If it did what kind of an instrument was employed, to sound the earth, and determine the matter of a quarter of an inch in ordinary rough, cloddy ground? We sagely suspect the majority knows very little of what it is talking about, and we don't hesitate to say, that he is probably an ignoramus and a humbug.

The depth to which the cane seed should be planted is governed, like a good many other things by circumstances; the nature of the soil, its particular condition at the time of planting, fineness, moisture, temperature, the condition of the seed, whether dry or soaked, the period in the season, whether early or late, all are to be considered, and the proper depth to plant is to be determined by these, measured with the rule of common sense, and not an instrument graduated by barley corns and inches. If the soil is fine and damp, and warm, and is to be pressed down snugly upon the seed, and if it is not inclined to crust or bake upon the surface, it is then allowable to plant shallow—very shallow perhaps; but if the same conditions exist, except that of dampness, shallow planting is senseless planting; the seed might just as well be in a dry house. If the seed is to be planted early, when spring showers are likely to occur frequently, and if the

ground is damp and cold and heavy, almost certain to remain moist for some time on the surface, the seed may be left as shallow as possible; if deposited upon the surface and pressed down with the foot or a hoe, it will probably do as well as any way. Seeds left on the surface of the ground all winter from a previous growth of cane usually germinate in the spring. It is desirable to follow with the planting as soon as possible after the harrow, as it gives the cane at least an even start with the weeds, moreover, the state of the ground is the best immediately after being disturbed, both for covering appropriately and promoting an early growth.—*Sorgo Journal*.

Trees: their Æsthetic Influence.

"On for a law, originating in the perception of comfort, and self-imposed, which should make the planting of a few trees an operation as certain as the building of a house! Men would live longer and better for the happiness given to their homes."—*Manse Garden*.

Complaints are not unfrequently made, that the sons of most of our well-to-do farmers are all crowding into the so called learned professions, and instead of pursuing the noble and healthful business of cultivating the soil, have turned aside from the plough, "the first creditor" as Burke has finely remarked, "in every country," and become transformed from independent gentlemen into third-rate physicians, and lawyers, of whom it may certainly be said that they indifferently administer justice. The chief causes of this unfortunate state of things it is not our present purpose to discuss; but the idea has forced itself upon our notice, whether the want of some such wholesome, self-imposed law as that referred in the quotation given above, has not had some influence in bringing it about. In other words, would not the "old homestead" and "ancestral acres" of our Canadian yeomen—our country gentlemen, become more dear to their children if they were made pleasanter? There is a sad want of neatness and external comfort about too many of our farm-houses—a lack of goodly shade-trees and pleasant flowers—of lawns and evergreens clustered thereon, all of which give such a charm to the landscape in "the old country"—the "land of our sires," and let us add, golden links to those homes which stand girt about with beauty.

"Amidst their tall ancestral trees
O'er all the pleasant land."

If it be objected that our climate is against us; that we can never enjoy the varied beauties of the holly, the laurel, or the *laurustinus* which adorn the shrubberies of England, Scotland, and Ireland; we simply reply that these, however beautiful, are not necessary to make our Canadian homes attractive. We can at least rival Britain in our forest trees, and it is to these that we chiefly refer. Is the beech less superb here than it is in England? Or is "the bonnie birken tree" less beautiful and graceful; or are the bright berries of the rowan-tree less lustrous and cheerful than on the mountains of Scotland? And have we not in addition to these and other trees common to both this country and our loved Mother-Isle, two or three peculiar to this side of the Atlantic. One of these is an evergreen second to none in majestic beauty, though far too little appreciated, perhaps because like its grave, upright companion the pine, it is so common—we refer to the *hemlock*. Even in "the leafy month of June," when the forest is one mass of varied beauty and verdure, the stately *hemlock* challenges all its leafy competitors to draw away the admiration of any lover of trees, from its singular combination of grandeur and elegance; especially from the exquisite beauty of the contrast between the vivid light green of its fresh, pensile young shoots and the dark and somewhat sombre hue of its older foliage; while in the long dark months of winter, when most other trees are "barren as lances," it reigns supreme. The other Canadian beauty to which we have special reference is the *sugar-maple*, which superadds the outward graces of form and beauty to that internal sweetness of disposition which is so strikingly manifested about this season, when "the trembling year is unconformed, and gentle Spring and surly Winter are striving for the mastery!" In

beauty of form and colour, in magnificent umbrageousness, and, above all, in the gorgeous splendor of its autumnal hues, this beautiful tree has no superior. Well may the "sons of the soil" be proud to accept it as the chosen emblem of their country; and the daughters of Canada no less proud to have the bright autumnal flush of its leaves associated with their own blushing loveliness in patriotic verse and music."

Why then, do not our intelligent Canadian farmers shelter and adorn their dwellings with trees? Most of them have an abundant supply of beautiful young saplings on their own land, which only require careful and judicious transplanting, some in groups, some singly, to transform a bare, comfortless looking spot into a cheerful, cosy home. Our pines, birches, maples, spruces, hemlocks, &c., are as beautiful as they are useful; and their wonderful variety of form and foliage was not created without design, by the wise and beneficent Father of all, and that design was obviously the intelligent enjoyment of man. Ought we not then to look about us more and see

"How beautiful is all this fair, free world
Under God's open sky!"

and looking try to enjoy it more, and learn the sweet lessons which the beautiful and interesting "Book of Nature" was designed to teach? If we could only have our homes more adorned with trees and flowers, we believe they would be far pleasanter and more thought of; and the *homestead* (what a charm there is about this fine old expressive Saxon word!) more highly prized as the magnetic centre of each family, drawing to it every Christmas or Thanksgiving Day the most distant of its members. Ah! how little most of us know, how little we dream how much influence these things have—how strong is the attachment one forms to every individual plant whose growth is watched daily! But,

"A thing of beauty is a joy for ever,"

and if such joys are multiplied around our homes, we shall become a more happy and genial people, a home-loving people, and hence, a more intensely patriotic people. Such homes will furnish in abundance good citizens, able legislators, and, if need be, brave and skilful soldiers. We will only add as illustrative of our subject, the following choice extract from that delightful little volume—"Chronicles of a Garden," by the late Miss Henrietta Wilson, of Edinburgh, niece of the celebrated Professor John Wilson.

"There is no season when trees are not a source of pleasure, varied and unwearying. You may have but one of each kind, and you may think you know that one well, but watch it, study it, and every season of the year, every change in the weather will bring out new beauties.

"No plot so narrow, be but Nature there,
No waste so vacant, but may well employ
Each faculty of sense, and keep the heart
Awake to love and beauty."

"If, as Arthur Helps, truly says, 'the moral experiments of the world may be tried with the smallest quantities,' so may the pleasures of the woodlands. One tree may afford diversified enjoyment, not only by its form, its shade, or its foliage, but by the effects its leaves give to light, whether it be the 'cool, green light' that is so exquisitely refreshing, or the brilliant glow of *carmine* or *orange* seen glinting through the flickering foliage at noon or dewy eve."

HOLLY TREE.

Cobourg, March 7, 1865.

Early Fall Cultivation.

To the Editor of THE CANADA FARMER:

SIR,—It is an old saying, and a very true one, that good cultivation is a partial equivalent to manure. Although I do not pretend to be a Solon in these matters, yet I will venture to give a few hints upon this most important, and too often much-neglected principle of husbandry.

Taking a retrospective view, we find that people used to take a great deal of pains in preparing lands for the production of the great staple, viz.: fall wheat, by thorough summer-fallowing and manuring. At the same time lands of any description, and prepared in a very careless manner, were thought good enough for spring crops. The much greater importance and value following the production of spring grains is gradually reversing this mistaken policy, and barley, spring wheat and flax now occasionally gladden the eye on fallow lands, greeting the summer zephyrs with their graceful undulations. Although satisfied of the great advantages from summer fallowing, to clean the land, &c., yet I do not consider it so abso-

lutely essential to growing of spring crops, for by a judicious system the lands can be well prepared in the fall, if the land is not too dry to plough. To effect this the first ploughing should be done early, say in September.

Some farmers seem to think that when the harvest is secured a little relaxation may be enjoyed. The teams are allowed to run about the fields for a month perhaps, when, in fact, this is just the time to put them into work, and start the ploughs to turn over the land intended for the ensuing crop. But the hogs must run awhile in the stubble. Never mind that; a few heads turned under will grow up and make feed, and give us that evidence, so refreshing to the eye of a connoisseur, of that process of decomposition so invigorating to the soil, while the fall rains furnish those elements of replenishment to the grateful bosom of mellow fields.

Lands intended to be ploughed the second time in the fall can be manured after the first ploughing, and the lapse of one month, if the weather is favourable, will qualify them for the second. Or the manure may be put upon the lands to be ploughed, once in the fall, previous to the ploughing. In fields free from stumps I always plough the same way; I always find it ploughs better, both times, turning the lands back and forth. Many farmers, we find, make it a rule to plough across the furrows in every case, throwing up the lands into squares and diamonds, producing a wretched condition of the surface. Very few farmers appear to be aware of the advantage of ploughing early in the fall. Lands prepared in this manner are nearly as good as fallow lands. Barley lands might be ploughed in August with corresponding advantages, if the ground is not too dry.

I feel assured I can give no better evidence of the correctness of my theory than by example, if you will allow me to give the product of my crop on a small farm in 1864. Having a little leisure after the barley harvest of 1863, we set to work to rip up our barley ground in August. It was hard work and hot. But the desire to wreak vengeance upon thistles, and bring their roots up to the sun encouraged us to proceed and plough deep. I found this land was like a garden in the fall. We ploughed early in the fall, and had the moss of our ground prepared in the fall, which, on account of the extreme wet last spring, happened very lucky, although one field we ploughed in the spring produced the best crop. The rains were so disastrous in the month of May, even on high ground, that we found difficulty in getting in the seed. And here I might say a word in favour of gang-ploughs, for I found the "gangs" the best implements I had on wet fields. Cultivators were a bore, and ploughing out of the question. We got in all the seed by the 25th of May, and harvested a crop as follows:

Spring Wheat, 48 acres.....	1,100 bush.
Barley, 33 acres.....	950 "
Oats and Peas (mixed), 5 acres.....	150 "
Peas, 2 acres.....	40 "
Corn (hoe crop), 15 acres.....	450 "
Buckwheat, 5 acres.....	100 "

Total of Grain..... 2,790 bush.

The number of acres under crop was 108.

It is conceded, I believe by all, that the season of 1864 was the most unpropitious in this country since the memorable dry season of (I am told) 1826.

As the season advanced the earth became solid almost as frozen ground, and the smoke hung like a pall over the face of Nature. Gloom pervaded every precinct, and distress and danger from fire drove many in the new settlements from their homes. The extreme wet of the spring, followed by the extreme drouth of the summer, rendered many of the best lands of the country useless. But where high cultivation, on more favourable lands of good quality, existed, the crop was quite good. I refer, of course, particularly to spring crops; as fall wheat, in the older settlements, has become a foregone conclusion. I attribute the character of the crop, the details of which I have given, to be due to the system of culture I am advocating, notwithstanding the bad season. For spring crops my motto is—"plough early after harvest." Cultivate well; prepare the land in the fall, but a ploughing in the spring will not hurt it, if so prepared.

A DURHAM FARMER.

April 14, 1865.

Meadowvale Farm.

To the Editor of THE CANADA FARMER:

Sir,—Having just had the pleasure of visiting at this place, the farm owned and occupied by Mr. Wm. Gooderham, of the firm of Gooderham & Worts, and of inspecting his excellent system of sheep

management, and of general farming, I send you a brief account of the same. It will, I trust, furnish some matter of interest, and of profitable suggestion to your readers

His flock of sheep consists mostly of "Cotswold" grades, with a sprinkling of the "South Downs," and numbers between 400 and 500, and they are all of superior quality,—in excellent condition,—none of them with fleeces torn, nor sickly or diseased. The arrangement of buildings and yard enclosures, is such as to secure to them perfect shelter from storms, and separate apartments, for the breeding ewes, for lambs of the last year, and for other divisions of the flock, so as to prevent over crowding, or waste of fodder. All the hay fed on the premises is cut by a machine, worked by horse-power, and capable of cutting ten tons in a day. The barn is built on a gentle eminence, with an extended roof front and rear, to give a shed the entire length upon each side, and with a cellar under the whole building, for roots and for cattle stabling. Buildings extend almost entirely around the yard, and are so arranged that the sheep can all feed under cover. They are twenty-four feet wide,—covered, front and back and roofs, with rough boards. A manger, on the inside front, with an opening from the yard for passing in the feed, extends their entire length. There are hanging shutters, front and rear, that are raised in fair weather, so as to give free passage of air across the buildings, the entire length, and closed during storms. The yard is so arranged that all the sheep can go out without mixing the divisions, and can have daily access to water, for drinking. A few turnips are given out daily. The entire arrangement combines economy and convenience in a most successful manner, and is well worth a visit from any farmer engaged in sheep raising. Of 160 lambs last spring, only 3 were lost in raising.

For spring pasturage, he sows in the previous fall a few acres of rye, on which the sheep are allowed to feed. A small portion of the field is divided off by a moveable fence, made of tarred twine netting, which is moved from day to day, as the feed is consumed, and prevents waste by their running over it. In this way the sheep thrive finely, and the land is put in excellent condition for another crop.

In stall-feeding cattle for the market, he feeds hay and roots for about six weeks previous to turning them off, gives oil-cake, about 4 lbs. each per day. This makes very fine beef. All the operations upon his farm of about 350 acres, are conducted with that thoroughness and good management which make the occupation both pleasant and profitable. It may be said that "Mr. Gooderham can farm in this superior manner because he has means at his command, but that a small farmer cannot do so." To this it may be replied that he simply acts upon the maxim that "what is worth doing at all, is worth doing well," and this will apply to a farm of 50 acres, as well as to one of 350 acres.

E. L. S.

Neglect of Turnip Culture.

To the Editor of THE CANADA FARMER:

Sir,—In January last, I travelled through the northern part of the garden of Canada (County of Oxford), to buy beef cattle or store cattle; in reply to my many enquiries, I was told "we sold out in the fall. Fodder is very scarce. It does not pay to winter feed. It will not pay to grow turnips; we have had luck with the turnips" &c. It seems strange that our settlers (for they are not worthy of the name of farmers) are so blind to their own interests as to exhaust their land by growing wheat averaging ten bushels per acre, starving their stock or give them away in the fall, because they have not fodder sufficient to get them through winter. By the last statistics we raised 27 million bushels of wheat and only 10 million bushels of turnips. Is it any wonder that our defrauded soil refuses to give the abundant crops of wheat it did a few years ago, when we carry all away from the soil and take nothing back? The Press has for years urged the settler to thresh out his grain as soon as harvested, and sell it because he will get a cent or two more per bushel in the fall than he would get in the winter. By so doing he saves a penny and loses a pound. Some of your readers will ask how they lose when they get a higher price for their grain by neglecting their fall ploughing, not getting out their dung, or if it is got out, left lying in heaps to waste until the spring, and wasting their

straw and chaff before winter. Hundreds of animals are starved to death annually by the wilful waste of fodder.

And again, every writer in the country is writing about flax and its cultivation, showing by figures, that flax is the only crop that will restore our exhausted soils and fill our empty pockets with the needful. The flax crop will exhaust our soil more than the wheat crop, except we grow it in regular rotation, and consume the seed or its equivalent in oil-cake with turnip to winter-feed cattle, for the only way that we can restore our exhausted soils, is to manure our farms from resources within themselves.

The only way to remove this prejudice against turnip growing, is through the columns of THE CANADA FARMER. Let every turnip grower write to the FARMER his plan of preparing the land, sowing his seed, time of sowing, &c., &c. Establish Farmers' Clubs in every school section, so that farmers can meet together and exchange ideas on all agricultural subjects. And let every subscriber of THE CANADA FARMER lend his neighbour the FARMER for perusal, for it only wants to be known to be appreciated.

W. C. S.

Haysville, March 20, 1865.

Flax Culture vs. Wheat.

To the Editor of the Stratford Herald.

Sir.—As the season for sowing flax is fast approaching, farmers will naturally enquire what has been the result of the experiments of the past year. I beg a short space in your columns to lay before them a few candid facts connected with this crop. It is needless to state that from the continued drouth of the past summer it was probably the worst season that has occurred for years past, on which to have first introduced it; and farmers may justly be asked to consider how many fields of wheat under such circumstances have been harvested that have not paid the bare expense of the harvesting. However, it will be seen by the following statements that Flax at least bears a most favourable comparison with the great staple of the County, viz: Wheat:—

From 2 bushels sown—28 bushels seed, sold for	\$35.00
Fibre.....	21.42
	\$59.42
9 acres—168 bushels seed.....	\$125.00
Fibre.....	130.00
	\$255.00
1 acre—16 bushels seed.....	\$22.00
Fibre.....	15.00
	\$37.00
1/2 of acre—5 bushels seed.....	\$6.00
Fibre.....	4.94
	\$10.94
2 acres—seed.....	\$29.00
Fibre.....	25.00
	\$54.00
2 acres—seed 25 bushels.....	\$31.25
Fibre.....	18.00
	\$49.25
1 acre—20 bushels.....	\$25.00
Fibre.....	17.50
	\$42.50

many more cases might be adduced, but the above will give a fair estimate and when compared with the average yield of wheat of this County during the past year, which was certainly not over twelve bushels—it is thus evident that in all the above instances the balance is decidedly in favour of Flax, as a crop. This section of the Province is admitted by all persons conversant with the growth of Flax as perhaps the best suited to its culture, of any part of Upper Canada. I am fully satisfied that with care and attention, and on well selected soils, and with a more favourable season than the past, the above results would be doubled, certainly as far as fibre is concerned.

In placing these statements before the public the object has been to adhere to facts, and not hold out false inducements, leaving farmers to judge if it is not better to encourage the growth of a crop that will produce such results, rather than persist in the continued growth of wheat, the average of which is yearly being reduced in this County. There are now two flax mills in operation—one at St. Mary's, the other in Stratford—thus furnishing a sure market for all the seed and fibre that can be produced. Messrs. Brown & Co., of Stratford, are prepared to purchase any quantity of Flax that may be grown in this section during the coming season—They have had some of the past crop spun by farmers, and will shortly have about 300 yards of bagging ready for market. They will also furnish seed to farmers as far as possible.

W. IMLACH.

Stratford, April 3rd, 1865.

The Breeder and Grazier.

"Gipsy Queen."

ROAN, bred by Mr. Foljambe, Asberton Hall, Notts. calved on the 17th October, 1862, got by Imperial Windsor (18086), dam Sibyl by Mayduke (16553), dam Seraphine by Monarch (13347), dam Seraph by Lord Brawith (10465), &c.

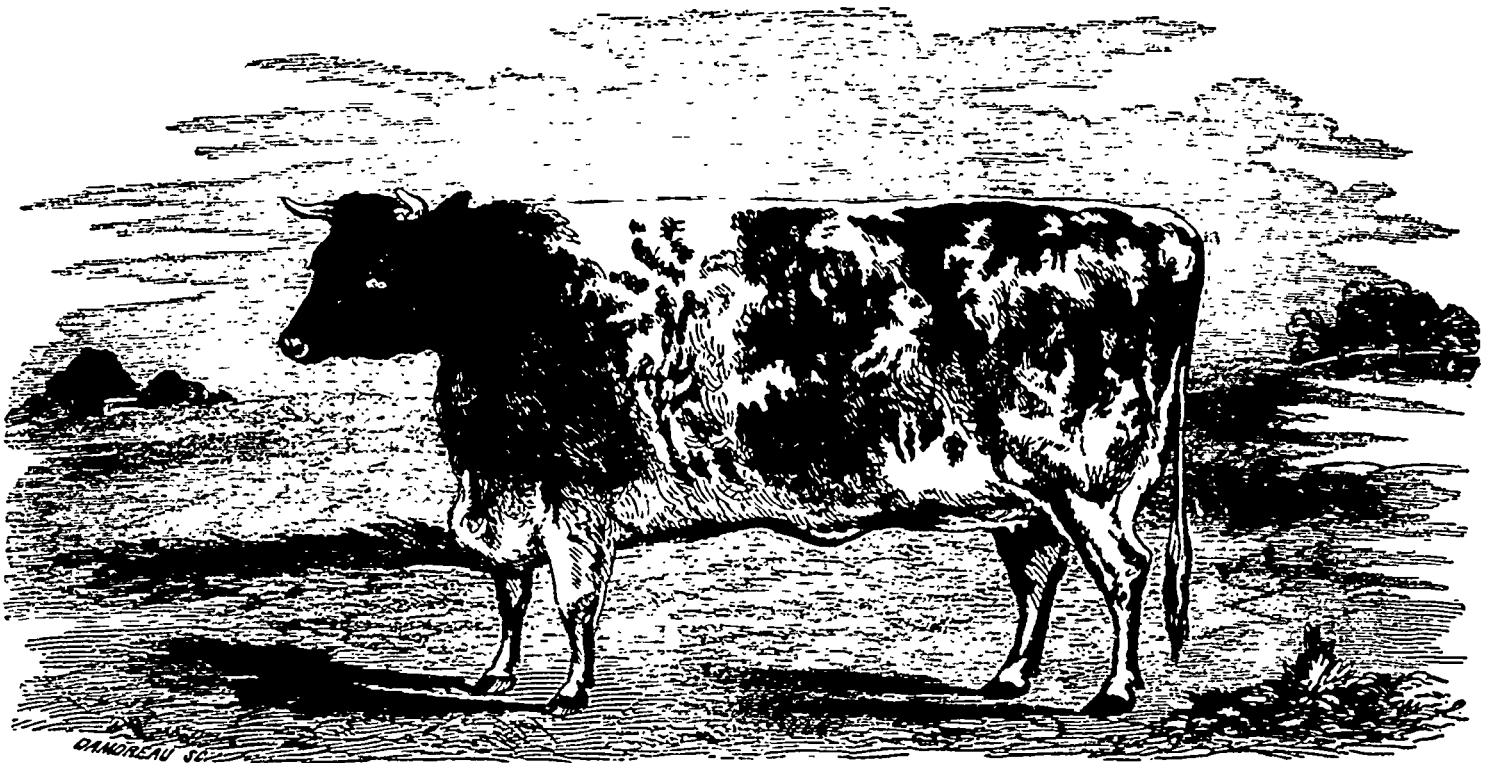
"Gipsy Queen" won the first prize as a yearling heifer, at the Royal English Society's Show, held at Newcastle, in July last, beating a number of fine heifers, among others, Mr. Richard Booth's Lady Fragrant, Mr. Eastwood's Butterfly's Pageant, Blue Belle, and Eagle's Plume, bred by the Messrs. Mitchell. "Gipsy Queen" afterwards took the first prize at the North Lincolnshire Society's meeting at Gainsborough, but was beaten at the Yorkshire Society's Show, at Howden, where Mr. Booth's Lady Fragrant was placed first, Mr. Eastwood's Butterfly's Pageant, second, and "Gipsy Queen" received a high commendation, an award styled by the editor of

her portrait indicates, she was large for her age. Her fault was that she was rather large. Yet, she was so ripe in her points, and so even withal, that an impartial judge could not but admit that her proper place had been assigned to her. For a heifer of her age, her quarters were very closely packed, and the thickness of flesh on her back was remarkable. The Howden verdict was strangely heterodox. No doubt, Mr. Unthank and Mr. Knowles, as a reason for placing her third, urged with their colleague Mr. Singleton, that she had a miscellaneous pedigree; And certainly this is an objection of great weight, especially as against her male progeny. Her pedigree is made up of strange combinations, in great variety, of Booth, Bates, Mason, and Cherry blood. Her grandsire, Mayduke (16553), was bred by Mr. Ambler, and was got by Grand Turk (12969), dam Cherry 4th by Gainford 2nd (10255), &c., a combination of Booth, Bates, and Cherry. Her great grandsire, Monarch (13347), also bred by Mr. Ambler, was a bull chiefly of Mason blood, but he had a somewhat mixed pedigree. Her great great grandsire, Lord of Brawith (10465), a fine bull of his day, was descended from the Princess and Brampton tribes. The rest of "Gipsy Queen's"

ing. Sometimes a happy hit may be made, but generally, herds so bred have no distinctive character, and, consequently, want uniformity. If there be any virtue in pedigree, the certainty of producing uniformly good animals, of the same type, must be greatly enhanced by adhering, as closely as possible, to particular tribes. Such has been the experience of all successful breeders. Mr. Bates pursued this system with continued advantage for 30 years, and Thomas Booth, with his sons the late John and Richard, acted on the principle for 80 years, and they produced races of animals, which, for correct symmetry, strength of constitution, thick flesh, and great aptitude to fatten, have been unrivalled. Of course, in following this system, it is all important to make primarily a good selection. We cannot give our readers a better idea of our notion of a good Short-Horn than by quoting the language of one of the best judges and most successful breeders of our day, Mr. Douglas, of Athelstanford.

He says:—"It is not animals of a large scale that are wanted. In such subjects there is generally a preponderance of bone, long back, weak loins, flat ribs, and much coarse beef. What we want, in my

FIRST PRIZE YEARLING SHORT HORN HEIFER, AT THE ROYAL AGRICULTURAL SOCIETY'S SHOW. JULY, 1864.



"GIPSY QUEEN."

the Farmers' Magazine, "to be as false a finding as ever was recorded," although it was the work of that Short Horn Nestor, John Unthank, of Netherseales, and of Mr. Knowles, the guardian of Capt. Gunter's Duchesses. The former, having left his first love for Princess blood, now goes strongly for Booth, and of course he was the champion of Lady Fragrant; Mr. Knowles being a Bates man, went as gamely for the little red and white. The grand-daughter of Lord Ducie's pet bull, the Duke of Gloster (11382), Lady Fragrant, a rich roan, is a heifer of great style, with grand forequarters, but has a bare back, and is sadly deficient behind. Butterfly's Pageant was a neat, fine heifer, but had no wealth, she gave a good side picture, but when you stood in front of her, or behind her, she was narrow—very narrow. Altogether, she wanted the grand commanding presence which would have justified the 500 guinea bid, which, under the stroke of Mr. Strafford's hammer, transferred her from Townely Park to Whitewell, a quiet nook among the Lancashire Hills, where she only lived long enough to give birth to a bull-calf.

At the Newcastle meeting of the Royal, "Gipsy Queen" was one year and nine months old, and as

pedigree is largely of the Booth and Mason blood. Her strength of character was unquestionably derived from her sire, Imperial Windsor (18086), a very fine Booth bull, bred by Mr. Carr, of Stockhouse. He was got by Mr. R. Booth's Windsor (14013), a bull justly styled the "Modern Comet," and perhaps the most impressive sire which ever left the Warlaby pastures. He took nine first prizes at various national and local shows, among which, in 1854, were the three national first prizes at Lincoln, Berwick, and Armagh. Farewell, the dam of Imperial Windsor, was by Mr. R. Booth's Royal Buck (10750). She was of Mr. Booth's famous Mantalmi tribe, from which, Sir James the Rose (15290), the sire of Mr. Christie's Queen and Fido of Athelstan, is also descended; a family which has largely contributed to lay a solid foundation for the fame of the herds at Warlaby and Killerby.

Mr. Foljambe was offered 500 guineas for "Gipsy Queen" at Newcastle, and refused to part with her. This was a large price, taking into account her miscellaneous breeding. No doubt Mr. Foljambe fully appreciates the advantage of breeding *in line*, and having so well begun, will go on with Booth blood. No breeder can ever succeed by miscellaneous breed-

opinion, is an animal of apparently small scale—but in reality not so—having a great propensity to fatten; on short legs, with fine bone, massive, compact body, wide chest, ribs well sprung, thick loins, and well filled up quarter, with deep twist, body all equally covered over with heavy flesh, and plenty of soft hair, and having no coarse beef on any part. This is my standard of a Short-Horn, and when I speak of such, I have in my mind's eye many of Mr. Booth of Warlaby's best animals. Look at the docile, ever, intelligent expression of countenance, the waxy horn, moderately short neck, full neck vein, prominent bosom, beautifully laid shoulder, capacious chest, ribs well sprung from the back, thick fleshed, strong loins, deep flanks, hoggins well covered, lengthy, well-packed quarter, with deep twist, on straight legs and fine bone;—such are nearly all the animals that constitute Mr. Booth's celebrated tribes or families of Short-Horns. There can be no mistake about the character of this herd: it is so indelibly stamped that any person once seeing them would again detect the likeness of the head even in the killing-booth. In brief, I consider a perfect specimen of the Short-Horn one of the most beautiful objects in creation."

The Dairy.

Soiling Cows on Dairy Farms.

The feeding of milk cattle in a way to save all their manure, and to enable them to make the most economical use of all that grows upon the land devoted to fodder crops, is accomplished by what is termed "soiling." This is seldom practised in this country, not from any lack of minute explanation of the system and of its advantages by the agricultural press, and not by reason of there existing any reasonable doubts whether it would succeed in this country. It has been successfully practised by farmers in many

ous facts, or any one may prove them such after having had sufficient trial to learn how to manage with reasonable economy. The question is, How to do this: at least, How to BEGIN. Knowing that Mr. Donald G. Mitchell—the author of that very delightful and instructive book, "My Farm of Edgewood," which we have taken occasion more than once to commend to our readers—had given much thought to this subject, we wrote him for permission to publish his plan for beginning a system of soiling on an old farm, which is detailed in the book above referred to. Instead of this, Mr. Mitchell writes:

"I send you a rough draft of the shed I had proposed to build, which would have been a cheap but substantial affair, and which, as a manufactory of

would count for its true value; the cattle would be protected from the sun, and with a sufficient head of water at command, and a few feet of hose, the utmost cleanliness might be secured, and the temperature moderated at will. For success in soiling, particularly with corn-fodder, heavy manuring is essential; and the more rank and ammoniacal the dressing, the greater will be the succulence; and as the crop matures no seed, a reserve of mineral food will be left on deposit in the land for subsequent cereal crops. I do not think you can urge soiling too strongly; and I am satisfied that in ten years' time no good dairyman upon smooth lands within close neighbourhood of towns, will ever turn his cows to pasture."—*American Agriculturist.*

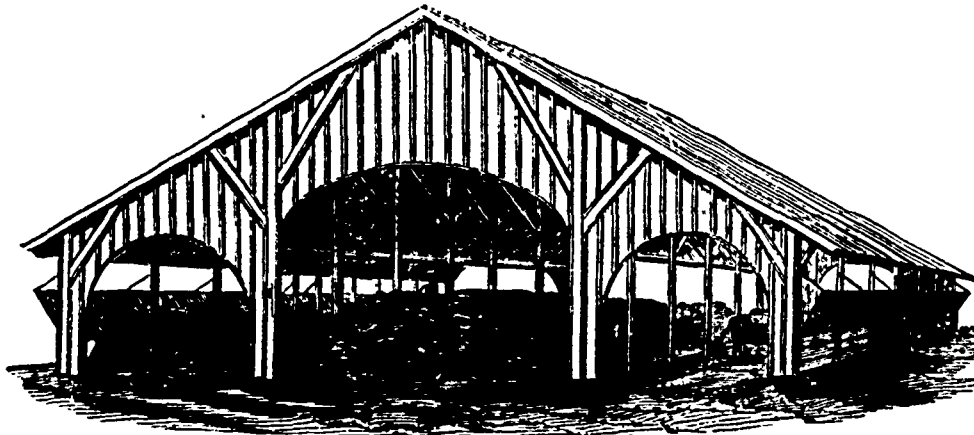


FIG. 1.—ELEVATION OF SUMMER FEEDING SHED—FOR DAIRY OF FIFTY COWS.

different localities. Nevertheless, few farmers can be brought to believe that the benefits are so great as they really are, and they seem to feel as if they could not spare the labour required to take care of the stock in stables. Besides, few farmers have buildings adapted to the purpose, and so centrally situated that the labor of hauling the fodder from the fields to the cattle is not a great bugbear. Soiling cows will pay, and may easily be done on many dairy farms. The advantages may be briefly enumerated, viz.:

1. The cows are kept in better condition, give more milk, are kinder, more docile, and hold out in milk longer, than if allowed to roam.

manure alone, would, I think, have paid for itself in three seasons. Were I to erect all buildings *de novo*. I would so arrange them as to make one feeding place serve for both seasons. But my old winter stables were neither centrally situated, nor were they so disposed as to admit of an economic handling of the corn fodder, or other green food which might be supplied. And *this last is a capital point*, when reckoning upon the advantages of feeding a herd of twenty to fifty animals, two or three times a day, throughout the busy season. Green corn-fodder is bulky and heavy; every half mile of transport counts largely; and if the fodder be handled over two or

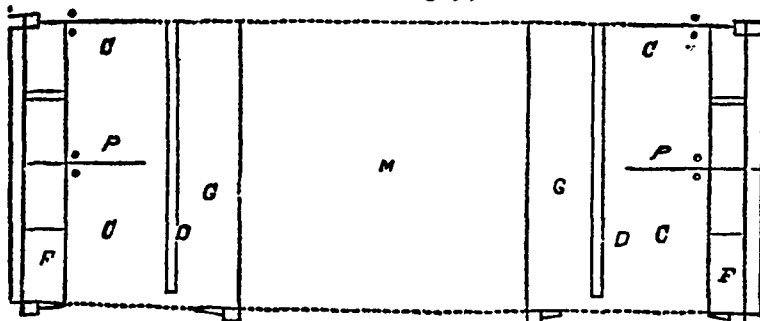


FIG. 2.—GROUND PLAN OF 16 FEET IN LENGTH OF THE FEEDING SHED.

REFERENCES—C. C. Cattle Floors; D. D. Drains for liquid manure, F. F. Feeding troughs, G. G. Gangways in rear of cattle; M. Manure heap; P. P. Two of the partitions between pairs of stalls.

2. The interior fences of a farm may be entirely dispensed with; a large yard being provided for the cows to take exercise in for an hour or two in a cool part of each day.

3. The entire product of the land is secured and fed to the cows. None of the crop is spoiled by the droppings of animals, nor hurt by their tread, nor by being lain upon; nor is it stunted in its growth by close cropping during the heat of summer when it can least endure this.

4. Both the solid and liquid excrements of the animals are saved without loss, to be applied to the soil at the best season, and in the best form, according to the judgment of the farmer—an advantage which outweighs all the others.

We do not propose to argue the above question of expediency. The advantages above stated are obvi-

three times for bestowal along the mangers of interior stabling, a great deal of labor is needlessly sacrificed. Again, my proposed summer-shed was not only central but within easy 'hauling' distance of the muck bed, from which I counted upon a weekly supply for the accumulating manure heap. And yet again, this manure heap would be within easy carting distance of the fields to be tilled the following spring. A shelter for the manure, under the conditions supposed, I should consider quite as important as a shelter for cattle. It is the habit with many who grow corn fodder to help out the August pasture, to scatter the newly cut stalks over the parched fields. Under these conditions, with a fiery sun, and a scorched turf, I believe that the loss of fertilizing qualities in the manure is enormous. With the feeding shed, every particle of manure

TO KEEP BUTTER SWEET IN A CASK.—A compound of one part sugar, one part nitre, and two parts of the best Spanish salt, beaten together into a fine powder, and mixed thoroughly with the butter in the proportion of one ounce to the pound, has been found to keep the butter in every respect sweet and sound during two years that it was in cask. It is also said to impart a rich marrowy flavour that no other butter ever acquires, and tastes very little of the salt.—*Irish Farmers' Gazette.*

CHEESE FACTORY IN ILLINOIS.—The *Prairie Farmer* says, we are informed that a cheese factory, on a small scale, we presume, is to be established in the vicinity of Hainesville, Lake Co., Ill., the present season. This we believe, will be the first effort of the kind in the West. The factory system has been found so satisfactory at the East that we have no doubt of its success here. We hope to hear of more efforts in the same direction. Dairying is already a profitable business here and may be made much more so. Success to the first cheese factory in Illinois.

It is rather flattering to our vanity, to find that Canada is ahead of Illinois in the matter of cheese factories: we had two or three in operation last season.

Sheep Husbandry.

SHEEP IMPOSTURE.—The *Ohio Farmer* says, it is informed that certain parties residing in Michigan are procuring sheep and colouring them with a composition of lampblack and tallow, and driving them into Ohio, and selling them at almost fabulous prices, and that a large sum has already been realized by this outrageous swindle.

TO MAKE EWES OWN STRANGE LAMBS.—A correspondent of the *Prairie Farmer* proposes the following artifice:—"Take a ewe which has lately lost her lamb, and start the blood a very little in the lower part of the nostril. Put the strange lamb to sucking her, and let her smell it. She smells her own blood, of course, and, in most cases, will own the lamb."

FATAL FIGHT BETWEEN TWO SHEEP.—As two rams belonging to H. Cleave, Esq., of Cholsey, were grazing together on the 23rd ult., in a meadow near his house, they were observed to retire a short distance so that the space between them was about fifteen yards, and after facing each other for some time, they suddenly rushed at each other, their foreheads meeting with a crash. Immediately after, one was observed to fall, and on examination it was found that the force of the collision had broken its neck.—*Wiltshire Mirror.*

SHEEP SHEARS.—Few people have any correct idea of the difference in saving by the use of good shears. It is profitable to get the very best that can be had. They should be of the best steel—and of medium length—the points not too sharp. The spring should not be too stiff—as the hand soon becomes weary. Experienced shearers will always select those having long blades. Those who pay no attention to the kind of shears they use, frequently mutilate the sheep and besides this, they leave enough wool on their backs to pay for a good pair of shears in one season. It is good economy to select the best shears, and see to it that they are kept sharp.—*Rural World.*

PASTURING ORCHARDS WITH SHEEP.—Allow me to give what I consider the best way to treat an orchard after it has been seeded to grass; that is to pasture it with sheep. They seem just fitted for the purpose, as they remove very little from the soil that is not returned; they eat what apples drop early because of worms, together with the pests themselves, and keep the grass down short, making it good picking up the fruit. I know by my own experience and the testi-

mony of observing and practical men, that trees will thrive and bear large crops of fruit, almost free from knots and worms, when sheep are allowed to run among them until the fruit begins to ripen—while other orchards that have been mowed will make only a small growth, and produce only second or third-rate fruit.

1. Grass and vegetation of all kinds (except the trees) should be kept down as short as possible.

2. All that grows in an orchard, except fruit, should be returned to the soil.

3. Trees should be allowed to branch low in order to shade the ground under them and keep grass from growing.

I find that apple trees with branches just high enough for sheep to go under, do much better than those trimmed up four or five feet.

The above remarks refer to bearing orchards—of course, young trees demand and receive cultivation, or else die.—*E.*

INJURIES TO SHEEP AND CATTLE BY DOGS The following is a copy of a bill, to render owners of dogs in England and Wales liable for injuries to cattle and sheep, which has been prepared and brought in by Mr. H. Fenwick, Mr. Shafto, and Sir H. Williamson:

Whereas, it is expedient to amend the law as to the liability of the owners of dogs for injuries done to cattle and sheep by such dogs; be it therefore enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in the present Parliament assembled, and by the authority of the same, as follows:

1. *Owner of dog to be liable in damages for any injury committed by his dog—Recovery of damages.* The owner of every dog shall be liable in damages for injury done to any cattle or sheep by his dog; and it shall not be necessary for the party seeking such damages to show a previous mischievous propensity in such dog, or the owner's knowledge of such previous propensity, or that the injury was attributable to neglect on the part of such owner. Such damages shall be recoverable by the owner of such cattle or sheep killed or injured in any court of competent jurisdiction. Where the amount of the damages claimed shall not exceed five pounds, the same shall be recoverable in a summary way before any justice or justices sitting in petty sessions under the provisions of the Act eleven and twelve Victoria, chapter forty-three.

2. *Who shall be deemed the owner of the dog.*—The occupier of any house or premises where any dog was kept or permitted to live, or remain at the time of such injury, shall be deemed to be the owner of such dog, and shall be liable as such, unless the said occupier can prove that he was not the owner of such dog at the time the injury complained of was committed, and that such dog was kept or permitted to live or remain in the said house or premises without his sanction or knowledge; provided always, that where there are more occupiers than one in any house or premises let in separate apartments, or lodgings, or otherwise, the occupier of that particular part of the premises in which such dog shall have been kept or permitted to live or remain at the time of such injury, shall be deemed to be the owner of such dog.

Veterinary Department.

Dropsy of the Belly or Ascites.

AMONGST grooms, cowmen, and shepherds, and even amongst indifferently educated farmers, and cow-leeches "the water," in some of its varieties, is believed to be of frequent occurrence. In many of the rural districts of England half the mortality amongst the domesticated animals is thus ignorantly ascribed to the much dreaded water. Any beast, whose disorder is not very distinctly made out, is tolerably certain to be set down as suffering from the water; whilst to say that a patient has died of this popular complaint is usually regarded as proof sufficient that all remedies were perfectly fruitless. The vulgar notion regarding the very general prevalence of "the water" doubtless gains credence from the fact that in all the cavities of the body—in the brain, in the pleura, around the heart itself, and within the cavity of the belly—there invariably occurs in all healthy animals a considerable quantity of thin serous fluid, which serves to lubricate and prevent friction. This natural secretion is sometimes mistaken for a diseased accumulation, and has occasionally been wittingly pointed out as such by those who wished to establish their own foregone conclusions, or to conceal their ignorance of the true cause of death.

Although by no means so common as the old books or the equally old-fashioned rural authorities would teach us, "the water," technically known as dropsy, does occasionally occur amongst the lower animals. Aged and pampered dogs suffer more frequently than any other veterinary patients, and exhibit most of the several forms of the disorder. Edema of the limbs or swelled legs is the variety most frequent amongst horses. Dropsy of the belly (ascites) and watery infiltration of the subcutaneous areolar textures (anasarca) are tolerably common alike in sheep and cattle. Dropsy sometimes comes on suddenly, probably like a flood of tears, or a smart attack of diarrhoea; more usually, however, the fluid accumulates slowly. True dropsy rarely results directly from inflammation, in which the outpoured fluid is limpy, and apt to coagulate, contains creamy pus, or is sometimes stained with blood, as was explained in our article on this subject, published three weeks ago, dropsy generally depends upon some obstruction to the circulation—some disease of the heart, liver, kidneys, or other internal organ, which retards the healthy current of the blood, and thus leads to distension of the weakened vessels, and oozing away of their more fluid contents. Sometimes the fluid is confined in a sack as in dropsy of the ovaries, uterus, or liver; more commonly, however, it floats unconfined in one of the internal cavities, as in dropsy of the chest or belly. *North British Agriculturist.*

Milk Fever, Garget, &c.

To the Editor of THE CANADA FARMER:

Sir,—I have a little "dearly-bought" experience to communicate to your numerous readers relative to the above often fatal and always troublesome diseases, which, I hope, may save some of them from purchasing their experience as expensively as I did, what I now communicate. Puerperal, or Milk Fever, is prone to attack only cows that are deep milkers and in good condition, and always either the first, second, third or fourth day after calving. The early symptoms of the disease are—loss of appetite, restlessness, wild, staring look, and a gradual, sometimes total, stoppage of milk: then the cow will show tremor and weakness over the loins, lose the power of her hind quarters, and soon after she will stagger, and eventually "drop." These several stages of the fever will sometimes occur within a few hours, and few cows, once down, ever get up again! I have, however, even then saved cows, but there must be sharp practice with the phlegms and physis, blisters, and so on. It is not my intention, however, to write at present of curative treatment, but preventive, as I believe an ounce of the latter worth a pound of the former any day! And where the treatment as follows is adopted there will be few cases of Milk Fever. Well, then, about a week before the cow's time is up I take four or five quarts of blood, more or less, according to condition and repeat this when there is sufficient external evidence that her time is near. Immediately after calving, a hot bran and linsed mash, and a few hours afterwards, 1½ lbs. of Epsom salts, with a tablespoonful of ginger, and if the physis does not operate in six hours, then another dose. Once the bowels are opened the cow is safe. Feed sparingly, and principally mashes, which I do not consider right without two or three pounds of ground oat-cake in each pailful. Such is my practice in cases when I fully anticipate an attack, and I have never yet seen a case of fever follow it. Heifers are not subject to the disease, but with them and cows in medium condition a dose of salts before and after calving will be found very far from bad practice. I have been often laughed at for proposing to bleed a cow before calving, told it was sure to dry her up, and many other sure things; but the only sure thing that followed was, she did not take milk fever, and did splendidly at the pail and otherwise. My neighbours at one time would say—give a sick cow ½ lb of salts! I find homoeopathic doses of simple medicines given to horses or cattle a nuisance, and act on the principle of plenty or none. I have given 4 lbs. of salts and 60 drops of croton oil in four hours, to a cow down with Milk Fever, and then only found any good effect.

Garget, or caked bag, is common to cows, young and old, and often spoils a cow in appearance and in reality—a dumb feat or two, and a tendency for ever after, from this loss, to a similar affection of the udder. My treatment for garget is simple and effective.

(*Aq. Ammonia*) spirit of hartshorn one part, with two parts oil, well rubbed on the parts affected, and all over the bag. I suppose doctors would call this trying to produce counter inflammation. Well, I had some crude notion of that sort; but however that may be, rub well, and three times daily; milk clean and often, and the trouble is soon over. I have been led to write to THE FARMER just now, because I have been busy these few days attending one of my cows that was, in my opinion, a very fit subject for both diseases to fasten on. She is all O. K., however, and her bag reduced from the size of a bushel basket to its proper dimensions, the cow is giving twenty four quarts of milk daily. It is such cows that are most liable to suffer, but I do not now look to premonitory symptoms of Milk Fever with that alarm which I felt years ago, after losing three as good thorough-bred Ayrshire cows as ever stood over a milk-pail.

Cohourg. PATRICK R. WRIGHT.

EPIDEMIC AMONG HORSES IN PARIS.—The horses of the cavalry regiments forming part of the garrison of Paris are at present, it is said, suffering from a disease resembling jaundice, and which the veterinary surgeons call *inappence*, because it deprives them of all appetite. The animal attacked with this disease generally dies after a few days' illness. This epidemic has been chiefly fatal among the horses of the Cuirassiers and Chasseurs of the Imperial Guard. The disease has likewise appeared in the stables of some large establishments where a great number of horses are kept. The epidemic has not appeared outside Paris.

LICE ON STOCK.—Caleb Canfield of Livingston Co, Mich., writes the *Rural* that he has no such thing about him as lice on cattle, horses, hogs, hens, geese, neither ticks on sheep. His remedy is sulphur. To an ox, or cow, or hen, he gives a *tablespoonful* in their feed; to sheep less. He puts it in the coops of the fowls in small lumps. Feeds it once a month in winter, but not in summer, except to hogs. He gives his horned cattle and horses a spoonful of pulverized saltpetre in the month of March or April, and again, without fail, when he turns them out to grass. He also feeds his cattle and horses about a pint of flax-seed each once a month in winter.

TREATMENT OF HORSES FEET.—Mr. Gangee, Sen., in the *Edinburgh Veterinary Review* for August, says, "The day will, I believe, soon come when the people will not allow cutting instruments to touch the soles of their horses' feet. I have said in former papers that the wall, sole and frog are so constructed that they mutually co-operate, and that the intermediate horn, which I have shown, is secreted between the wall and sole of their union, is also required to be left entire; but, by the prevailing custom of cutting the hoof, these substances which in their nature are rebounding springs, are destroyed or greatly impaired. The custom of thinning the sole, and likewise of keeping that part always in cow dung, or other wet soddening material, under the name of 'stoppings,' was brought into vogue after the establishment of our first veterinary schools."

Poultry Yard.

Shall we Dose the Hens with Lime?

"SEE to it that they have a plentiful supply of good oyster-shells, bone, old mortar, or lime in some form, always accessible." Who ever read an essay on poultry-keeping that did not give, in substance, the above directions? Yet I maintain that the opinion on which this direction rests is false. The popular argument runs about thus:—Poultry shells of their eggs; hence they need lime for the shells of their eggs; and as oyster-shells, lime, and mortar contain lime, they need oyster-shells, lime, and mortar to allow the major and, in part, the minor premise, but utterly reject the conclusion. Suppose we consider another proposition; eggs contain albumen; therefore, a very inconsistent advocate of the lime theory will emphasize the necessity of feeding them with albumen, and thus on we may argue with every substance that enters into the composition of the egg. Then a hundred observers start position of the egg. "But hens eat the lime; and why don't they eat it, why does their instinct teach them to eat it?" I reply—"But hens also eat fragments of rock and pottery, how do you dispose of this fact?" "O, 'tis the answer is, 'they eat these to use in the grinding and digestion of their food.'" Well, I reply again, can a

one prove to me that the lime they eat is not for this purpose and for this purpose only? Meanwhile, I will undertake to prove the affirmative. First, let us dispose of the bone. In the shells of eggs, the lime exists in the form of carbonate of lime, while the lime in bone is phosphate of lime, and by no process short of a miracle can the phosphate be changed into the carbonate: it would be just as easy to change iron into gold. Where is the sense, then, of feeding bone of animals for this purpose? Yet, while the great majority of poultry fanciers do this, the number is not small who make it a matter of principle to burn all the bones of the family waste, and pulverize them, and mix the powder with meal, and thus dose the poor fowls all the winter long, telling the public at times very complacently how the eggs come in under this process! So much for the bone. Now for the oyster-shell, mortar, &c. The males eat, proportionately to what they consume of other food, as much of this lime as the females; yet no one, I think, will maintain that their egg-forming instincts call for it, or that their egg-laying propensities are increased by it. Let us examine this question from another stand-point. Can there be a parallel instance produced in animal nature where food is naturally taken in a crude mineral form? The minerals necessary for the structure and due performance of the functions of animal life are contained in the animal and vegetable combinations which we consume.

In some districts, cows are seen to fight over a bare bone. This is because the phosphate element is wanting in the exhausted soil of the pastures of such regions, and hence the vegetable product on which the cows feed cannot supply the necessary amount of phosphate. That such an appetite is unnatural, the result of the abnormal cravings of disease, the thin and rickety condition of such cattle demonstrates. To be convinced how unnatural such food is, consider the conditions of fowls and birds which live wild on the vast primitive formations of the country where carbonate of lime, in any mineral form, from the scarcity of snails over many of such areas, is almost unknown. Eggs are as readily produced by the feathered tribes that dwell there, and are contained in as fine a structure of lime as comes out of the pet poultry-house of any fancier.

Why do not farmers feed phosphate of lime to their cows, as every quart of milk drawn from them contains some of this mineral? Because the Creator was too wise a planner to make any such crude work necessary. He combined the portion of phosphate necessary for the full performing of her functions in the structure of the vegetable food of the animal, and made that most wonderful laboratory—the stomach and its organs, capable of extracting it from such food. So with poultry: the grain on which they feed contains in itself the proportion of carbonate of lime necessary for the formation of the shell of the egg.

If the reasoning thus far is not satisfactory, then let me say to some old won't-be-convinced, for every instance you will bring forward where the eggs of poultry lacked a shell, when not fed with lime fodder, I will bring a parallel one where they formed perfect shells, month after month, without having any access during the period to a particle of such fodder. A soft shelled egg indicates some disease in the ovarian system of the fowl; and, in such isolated cases, it is barely possible that lime, as fed, may act as a medicine.

If I am asked, "Why, then, do poultry eat lime?" I answer, for the same reason that they eat fragments of stone, to give them the means of grinding their food. Now, every miller knows that the harder and sharper the stone the better it grinds. The instincts of poultry teach them the same truth, and they will select in preference the hard sharp particles. They also seem to have a fancy for anything small but showy in colour; will hence occasionally eat buttons and the like. It is true they devour egg-shells when fresh, but it is also true that such shells have quite a coating of animal matter adhering to them; and the hens, it may be noticed, will eagerly turn them up with their bills, to get access to the little sediment of this, which oftentimes is found in the bottom of the shell. For the same reason, fragments of fresh bone may be of advantage. The fragments of stone and the like voided with the manure of fowls are always worn smooth; all the sharp angles are gone. Here, then, is a hint. In supplying grinding materials (that is the term, not food) to your poultry, supply them with such as is hard and contains plenty of sharp angles; hence reject old mortar, burned bone, or egg shells, and beach gravel, and give pulverised clam shells, pounded raw bones, pounded crockery, pounded stones, and the like. If I am correct in my position, Mr. Editor (and I presented substantially the same in an agricultural address several years ago), then I trust the old theory will no longer be dinged-donged about the public press, as much a reflection on the good sense of the community as it shames the scientific progress of the age.—JAMES J. H. GREGORY, Marblehead, Mass., in *Albany Country Gentleman*.

Entomology.

Canadian Butterflies.

SOME time ago, a box containing some rather dilapidated specimens of butterflies and moths, was left at our office by "Mr. Alex. Pirrie, of Brooklin House, Brooklin, C. W.," with the request that we should describe them in THE CANADA FARMER. As there was nothing particularly note-worthy among them, all being very common and well-known species, they were neglected for some time; we now, however, subjoin a list of them, with the plants upon which their caterpillars usually feed. For descriptions and figures of these, as well as many more of our Canadian species of insects, we must refer our correspondent to "Harris' Insects Injurious to Vegetation,"—new edition, edited by C. L. Flint. Boston: Crosby & Nichols, 1862,—a most valuable work which ought to be in the hands of all our educated farmers and gardeners who are interested in the ravages of our insect foes, and wish to know the best means of guarding against them.

The following are the species we received:—

Papilio turnus (Tiger swallow-tail butterfly), caterpillar feeds on the choke-cherry, and other species of *Prunus*.

Papilio asterias (Black swallow-tail), on the carrot, and other umbelliferous plants.

Colias philodice (Clouded sulphur), on clover and various trefoils.

Danaus archippus (the Archippus), on the milk-weed (*Aselepias*).

Argynnis cybele (Silver-spotted stillary), on violets and other flowers.

Vanessa antiopa (Cambrenell beauty), on willow.

Sphinx cinerea (Ash-coloured hawk-moth), on lilac.

Saturnia polyphemus (Eyed-emperor moth), on elm, lime, &c.

Catocala cerogama (Yellow-underwing moth), on black walnut.

We shall always be happy to receive specimens of insects, from our friends in various parts of the country, and give what information we can about them; but as much of their value and interest depends upon the mode in which they are collected and preserved, especially in the case of the more fragile and delicate orders, we beg that a little care may be exercised in this respect, and attention be paid also to packing. To assist those who take an interest in this department of natural history, we have determined upon publishing shortly, brief directions for collecting, setting, and preserving insects. Should Mr. Pirrie intend continuing to collect insects, he cannot do better than become a member of the Entomological Society of Canada, whose headquarters are in Toronto.

Insect Destruction and Bird Preservation.

To the Editor of THE CANADA FARMER:

SIR,—Since coming to this country, twenty years ago, I have observed a great decrease in the number of our small birds, many kinds of which have almost disappeared; and to this I attribute principally the increase of the grubs and flies which infest our farms and gardens.

I believe that some of our legislators have taken the matter in hand and introduced Bills into Parliament for the preservation of the smaller kinds of birds, by preventing the shooting at and killing of them. I do not think that legislation can do much to remedy the matter; few men are wanton enough to exterminate, and it is only to those few that the law would apply. The mischief is entirely attributable to our common black crow, whose numbers have also largely increased among us, and which is quite a different bird to the rook of the Old Country. The crow here is entirely carnivorous, and will only feed upon roots and grain when something more to his taste does not present itself. crows, and the young of small

birds are his principal food, when they can be had, also carrion; and when he cannot find those he has recourse to grain and roots. I have frequently watched him during summer, when the birds are busy with their family affairs, searching every tuft of grass and bush in quest of a dainty morsel for his own family, in the shape of a fresh egg or an undegged robin or sparrow. If farmers would turn their attention at this time of year to destroying the nests of crows which may be built in their woods, their numbers might be easily diminished, much to the farmer's benefit, in the consequent increase of our small birds and the decrease of mischievous insects.

The nests of crows can be easily discovered at this season, as they build before the trees come into leaf. They are also very easily trapped or poisoned. To the sportsman the crow is also a great enemy, and I have no doubt but for their numbers we should find ten times the amount of game birds in this country that we do now. I have known a tract of country in the Highlands over which I have walked for days without seeing more than one or two grouse, and in the course of five years, after the proprietor began to encourage the trapping of vermin, principally the grey crow, one gun could with ease kill from fifteen to twenty brace of birds in a day. Other varieties of birds which bred with us increased in the same proportion.

NOR. THOS. MACLEOD.
Toronto, 25th March, 1865.

The Household.

Boot and Shoe Grease.

THE *Shoe and Leather Reporter* says hog's lard is admirably adapted to secure to leather both pliability and impermeability to water; train oil after it dries up, renders the leather brittle. Hog's lard renders the leather perfectly pliant, and no water can penetrate it. It is especially suitable for greasing boots and shoes; but in the summer seasons an eighth part of tallow should be melted with it. It should be laid on when in a melted state; but no warmer than one's finger dipped in the mass can bear. When it is first applied to a boot or shoe, the leather should be previously soaked in water, that it may swell up, so that the pores can open well and thoroughly absorb the lard. The liquid lard should be smeared over (to be water proof) at least three or four times, and sole leather oftener still. Afterward the lard remaining visible on the outside should be wiped off with a rag. By this means you have a water-proof boot or shoe, without the annoyance caused by most stuffs of penetrating the leather and greasing the stockings. An occasional coating of hog's lard is also to be recommended for patent-leather boots or shoes, as it prevents the leather from cracking, and if it be not rubbed in too strongly the leather will shine just as well after the grease has been applied.

BEAN SOUP.—"A Bachelor of 30 years" wishes a receipt for bean soup. Get a wife that knows how to make it.—Eureka, in *Country Gent*.

The St. Louis Republican says that after experimenting for five years, Mr. Robert Moore of Bloomington, Illinois, has discovered a method of crystallization, by which the syrup from Impheo and Chinese sugar cane can be advantageously reduced to sugar.

SWEET CIDER.—A. M. Ward, Hartford Co., Conn., writes: "After years of 'fussing' with cider to 'make it good' I have this season found the short road to perfection. Took cider direct from the press, heated nearly to a scald over the fire, returned it to a barrel, and have since made daily use of it with great satisfaction."—*American Agriculturist*.

TOMATO SAUCE.—Mrs. G. Dowdeswell, seeing a wish expressed in the last number for a recipe for making tomato sauce, begs to mention a very simple mode adopted by herself for some few years past, by which she can have the same prepared by the cook as required, fresh at any time. The tomatoes are gathered perfectly ripe, free from cracks or bruises, and are gently wiped with a soft cloth, and placed in a wide-mouthed jar. Some vinegar, having been boiled and allowed to stand until cold, is then poured over them, sufficient being used to entirely cover them. The jar is then covered with wetted bladder, and the tomatoes keep perfectly fresh and good until those of the following season come in. The peasantry in the south of France keep the tomatoes in this simple manner. Their mode of making sauce Mrs. Dowdeswell, unfortunately, has not perfectly; but the tomatoes in the manner described, can be made as required into sauce by any cook.—*The Dutch House, Worcestershire*.



WILD PIGEON ROOSTS.—"H. P. H. asks—"Can any of your readers inform me where a wild pigeon roost, within three or four hours of Toronto, can be seen."

WILD LUPINES.—A correspondent asks:—"Where could I get the seeds, say a peck or a bushel of the wild lupine, which grows so abundantly in the bush. Last year there were thousands near the Humber flats."

NATIVE BEES.—"A Bee-keeper" strongly recommends his neighbours to be satisfied with the Canadian native bee. The honey they make is delicious, and abundant in quantity.

INDICATION OF SPRING.—A correspondent writes, April 12:—"A wasp was picked up ten days ago on the side walk; and our Camberwell Beauty (*Varepa antiopa*), and the common tortoise shell have also been taken."

WEIGHT OF BONE-DEBT.—"Peter R. Lamb & Co.," of Toronto, write:—"We beg to inform your correspondent 'CALX,' that bone dust averages from 40 to 45 lbs. per bushel, according to the dryness of the bone or about 50 bushels to the ton, and is worth \$25 per ton. See Advertisement."

A LEGAL QUESTION.—"J. H." of Epsom, writes that it was his intention to raise a few acres of flax this year, but being a tenant farmer, his landlord has notified him that he cannot sell the flax fibre, since he is bound by a covenant in his lease not to sell straw off the premises. "J. H." writes to know whether the stalk of flax is legally considered straw?

WINTER BARLEY.—A correspondent writes from Lambton:—"I would like information from you or some of your subscribers, where winter barley can be obtained. We had some of it here about thirty years ago, but at that time there was no market for it here, and no means to export it, and being kept in a dry place too long, it lost its vitality."

OIL INDICATIONS.—"X. Y. Z." writes:—"Your correspondent who wishes information about oil indications, many obtain it by writing the Am. News Co. New York, for a work entitled 'Petroleum and Petroleum Wells.' It tells what Petroleum is, where it is found, what used for, where to sink wells, and how, and is a complete guide-book and description of the oil-regions of Pennsylvania, Western Virginia, and Ohio."

STRAWBERRY CULTURE.—"Wm. Strouger," of Newcastle, writes, at the request of "many persons," for information as to the cultivation of the strawberry. He says:—"There are many prevailing contrary opinions and methods in this vicinity, but the plant is seldom brought to any great degree of perfection."

ANS.—See article in our Horticultural department.

USE OF MUCK.—"P. Murson," of New Carlisle, asks:—"Would it be a good plan to apply bog earth in its raw state, or in a compost. We have swamps close at hand, both salt and fresh water, would it make a good top-dressing for hay land?"

ANS.—It is better to compost the muck before using it, whether as a top-dressing or in any other way.

BEE-MOTH PREVENTIVE.—"George Nettle, Sen.," of Fort Erie, says:—"I shall feel obliged by your informing me whether you think that a patent for the complete exclusion of the Bee-Moth from the hive, at about the cost of three-quarters of a dollar for each hive, would meet with such general demand as to guarantee my embarking in the trouble and expense of obtaining the patent, and what would be the expense of it?"

HOW TO CULTIVATE SORGHUM.—"Alex McGibbon," of Brownsbury, writes:—"Could you let me know, through the medium of THE CANADA FARMER, how to

cultivate sorghum; also, the time for cutting and how to manufacture it into sugar?"

ANS.—Our correspondent will find his enquiries partially answered in an article elsewhere in this issue, entitled "All about Sorghum." We shall endeavour to give further particulars about syrup and sugar making before the time comes for these operations.

MISSING NAMES OF THE CANADA FARMER.—"J. W. Thomson," of Roseville, says:—"There are two numbers of THE CANADA FARMER which I have not received. Please mail them to me."

ANS.—We shall do so willingly if our correspondent will tell us which two they are.

THE HALDIMAND CHEAP LANDS.—"C. Sutton," R. R. Depot, Brantford, says:—"My last CANADA FARMER has a letter from AGRICOLA, stating how cheap are improved farms in his county (Haldimand). As that is just what I want, I am sorry his name and address did not appear. If you will furnish them in your next, or drop a line at my expense, you will confer a favour."

ANS.—We have not the name and address desired, but if "AGRICOLA" will furnish them, we shall cheerfully insert them in our next, as we have a number of enquiries like the above.

IMPROVED STOCK WANTED.—"James Holliday," of Scotch Line, Perth, enquires:—"Can you inform a young Club where they can obtain improved stock for general purposes, and what would be the price of 1 and 2-year old cattle? Our Club has only been in operation six months, our object being 'To discuss matters of agricultural interest, to procure superior kinds of seed, and to improve the breed of stock by importation or otherwise.'"

ANS.—We advise our correspondent to correspond with Mr. John Snell, of Chingacoty, Mr. F. W. Stone, of Guelph, Mr. Stock, of Waterdown, or some other breeder of improved cattle.

"WHY WAS IT NOT PUBLISHED?"—"W. H. H." writes to enquire about a communication for THE CANADA FARMER which has not appeared in our columns. He says:—"I am not aware that there was anything in it improper for publication. Will you please let me know why it was not published? Our impression is that the letter in question was on a subject on which we had received a number of communications, all of which could not possibly appear. And we take this opportunity of saying to correspondent's, whose productions do not see the light, that it is never from want of appreciation or gratitude on our part, that any are laid aside. The multitude of letters we receive, compels us, however reluctantly, to consign some to the waste-paper basket."

READ'S SUBSOIL PLOUGH.—"Charles Penner," of Kingston, writes:—"In your last number I perceive 'C. West' wishes 'An Old Subscriber' to send him a description of Read's Subsoil Plough. I expect I am the person alluded to, as I addressed you on the subject. If you refer to my letter you will find I subscribed myself 'An Old Subsoiler,' not 'An Old Subscriber,' as you state. If 'C. West' will pay the freight I will, with much pleasure, send him my plough, so that he can try it and ascertain if it will suit the purpose he requires. One strong horse will subsoil six inches deep in the kind of soil he describes. The beam and handles can be made either of wood or iron; mine are wood."

REMEDY FOR FRECKLES.—"D." writes from York Township as follows:—"In accordance with your request and that of your 'fair correspondent, who would be yet fairer,' I herewith send my mother's remedy for freckles—one that is warranted 'not to injure the skin.'—Over fifty years ago, I had sisters who, in the presence of their mother, were regretting that they had freckles in their faces. Mother told them she knew a certain cure, and if they would faithfully follow the prescription she would give it them. This they readily promised to do. It was as follows:—Go down into the meadow by sunrise each morning in the month of May, and wash your faces in the dew from the grass. Do this, said she, and I will engage you will, by the first day of June, have no cause to complain. Neither did they."

Another correspondent says:—"If 'M. P.' will wash her face with fresh buttermilk she will find it remove the freckles."

MAPLE SUGAR MAKING TAUGHT BY THE CANADA FARMER.—"Millar Fleming," of Kincairdine, County of Bruce, in the flush of his joy at having learned how to make first-class maple sugar, writes:—"As maple sugar making is now about over, I hasten to let you know that before we got THE CANADA FARMER amongst us bushwhackers and clodhoppers, the maple sugar we made used to be as black as ebony; now it will compare with muscovado. The full directions given by you have taught us 'how to do it.' All my neighbours wish success to THE CANADA FARMER, and when British America becomes the third power of this terrestrial sphere, may it circulate to every corner! It is, as everybody knows, very pleasant to have our friends cherish sweet thoughts of us, and spontaneous testimonies like the above to the usefulness of THE CANADA FARMER are both gratifying and encouraging."

CHEAP CANADIAN LAND—"ROTTEN OLD ENGLAND."—"Wm. Cathmore," of Wilmington, Del., U.S., writes:—"Will 'Agricola, Cayuga, Co. Haldimand,' please to give us more information, through THE CANADA FARMER, or correspond with me by letter (unpaid), as to where to get cheap cleared land. I was very sorry to see in 'W. R. Carter's' letter in your Number of March 15th, the expression—'But this is in rotten old England, where they maintain all manner of old-world things.' But I got more than compensated in your extract from the Brantford Courier."

ANS.—Our correspondent should have taken "W. R. Carter's" language in an ironical sense, for such was manifestly his design. No one, we are persuaded, has a more profound respect for "Old England" than the writer of the sentence which has annoyed our Delaware correspondent.

SELF-RAKING REAPERS, &c.—"A Subscriber" writes from Hull as follows:—"Would you kindly inform me what machine you would recommend as a combined reaper and mower, one which lays the grain properly, and is a self-raker, and of the lightest draught. The machines in use here are not good reapers, and require too much care in raking off the grain. Please also give the name of the best maker of horse cultivators, with price."

ANS.—We must refer our correspondent to the Report of the Judges at the last Provincial Exhibition, as our best reply to his enquiries about self-raking reapers. In reference to cultivators, we may state that most of our agricultural implement makers manufacture them. Our correspondent does not state whether it is a one or two-horse cultivator about which he inquires, and we recommend him to communicate with the nearest respectable implement maker.

FLAX MILL WANTED.—"John Duncan," of Moore, County Lambton, writes:—"I wish to call the attention of the capitalists of Canada, to the want there exists in this county of a flax mill, as I believe there is not a county in Canada West that is better adapted to its growth, as regards the quality of the soil, and the nature of the climate; and I think also from the extreme difficulty we have experienced in maturing a full crop of wheat, for some years past, on account of the midge, the farmers here would turn their attention to other and surer crops, if there was a market for it, as there would be if there was a flax mill in the county. There is not one, so far as I know, nearer than St. Mary's, county of Perth, and I think it would not pay to send it so far in the straw, so that if some of the monied men in the county will start one he will have the district all to himself. I have raised a little for my own use, for a number of years, and am convinced that there is no difficulty in growing it to any extent."

HOW TO RAISE A THORN HEDGE.—"W. C. S.," of Haysville, gives the following directions on this subject:—"Cull the haws the last week in October or the beginning of November, when the leaves have fallen off the trees; put them into a box or barrel and leave them out in the air exposed for twelve months. In England they bury them in the ground for a year, until the seed is partly decayed. Then sow the seed in rows two feet apart, and when they come up thin them to about two inches apart. In two years they will be large enough to transplant. Cut off the top of the

thorn, leaving it about six inches long, dress the roots. In clayey or wet situations, raise a bank two feet high, faced up with stones or sods, and a drain by the side of the bank to carry off all stagnant water. Plant the thorns on the top of the bank, about six inches apart. On light, porous soils, plough a ridge nine feet wide where you intend to plant your hedge, draw a straight furrow with the plough on the centre of the ridge, and plant the thorns in the furrow. In six years from the time that they were transplanted they will be strong enough to turn bush cattle."

NEATS' FOOT OIL.—"A. S." of Muskoka, writes: "In your next number will you please insert a good receipt for making Neats' foot oil."

Ans.—The following paragraph from a recent number of the *German Town Telegraph* will perhaps be of use to our correspondent.

"The hoofs are chopped off, and the other portions are cracked and boiled thoroughly. From the surface of this boiled mass, about one pint of pure neats-foot oil is skimmed, which is unsurpassed by any other oleaginous matter for harness, shoes, &c. After the oil is taken off, the water is strained to separate from it any fatty particles that may remain, and then it is boiled again, until upon trying, it is found it will settle into a stiff jelly. It is then poured into flat-bottomed dishes, and when cold cut into suitable sized pieces. It hardens in a few days, and you will then have a very fine article of glue, free from impurities of every kind, sufficient for family use for a twelve month. By taking a portion of this glutinous substance before it becomes too thick, and brushing it over pieces of silk, you will have just as much court-plaster as you desire, inodorous, tenacious, and entirely free from those poisonous qualities which cause (as much of the article sold by apothecaries does) inflammation, when applied to scratches, cuts, and sores."

AGRICULTURAL EMPORIUM.—"W. Weld," of Delaware, writes:—"Having frequently experienced the inconvenience, loss of time, and expense of travelling about, to Fairs, Agricultural Exhibitions, breeders' farms, and seedsmen's establishments, in search of stock and seeds of the best kinds, and often not being able to procure what I wanted, I suggest for the benefit of agriculturists generally, that an Agricultural Emporium be established, for the sale of stock, seeds, and implements of the best kinds. Let a Company be formed, a stock book opened, a suitable tract of land purchased near a railroad; let the ground be properly laid out, and suitable buildings erected thereon; let a connection be formed with the principal breeders in Europe and America. let correspondence be had with some of the principal farmers in different parts of the country, for the purpose of disposing of such stock or seeds as might be had in the different sections, &c. Such an establishment, I am convinced would be a safe, and profitable investment, if properly managed, and would be highly beneficial to the country generally, especially so to the vicinity where it might be established. So sanguine am I of its success, that I am willing to invest the whole of my property in it, if money could be had at a moderate rate of interest."

LIVE HOGS.—Our friend "Samuel Nash," of Hamilton, sends us another letter on "the old subject."

"Farmers will do well to keep in mind, that fat hogs will undoubtedly command a high price during the coming summer for curing in ice at Hamilton: 5 cents per 100 lbs. live weight, may I think, be safely calculated on from 1st of June to 1st of November. But some may ask, what guarantee have we that 5 cents will be secured to us? Such a question would seem natural enough, and strictly speaking no absolute guarantee can be given. Pork like other commodities, is of course, subject to fluctuations in price. This much however can be said, that the stock of American bacon, is at present very small in England and the price high, viz., 52s and 53s stg. per 112 lbs., and no large amount can possibly arrive there be-

fore next December, and these appear to be good reasons why pork should be dear in the meantime. And I would be perfectly willing to back an opinion based on these reasons, by entering now into contracts for 400 hogs 1st week in June, 400 1st week in July, 400 1st week in August, and 400 1st week in September, weight, 200 to 275 each alive, price 5 cents per 100 lbs., delivered at Hamilton—Disubbery fed hogs excepted."

ABOUT THE STOCK.—"A Subscriber" writes from Orono:—"I have read THE CANADA FARMER from the beginning, and I do not remember of having read anything about that garden flower, the Stock. Though I am a follower of Tubal Cain by profession, yet I am interested in horticulture, and the progressive movements of the day. About two years ago, I bought some Stock seed, and a few flowers from that seed were double. The question occurred to me, how are those double ones produced? After thinking a while, I resolved to experiment on the single ones. After selecting some four or five young ones, I watered them with manure water, and pinched off all the flowers but three on one, and two on another, and one on another, also all the other shoots, thinking that by running all the sap into a few pods, I should have a few vigorous and healthy seeds that would certainly produce double flowers. The pods were fine ones indeed, twice as large as the ordinary ones. But the flowers from them proved to be single ones. During the time that I was experimenting on them I conversed with several seedsmen and florists, and they assured me that I should have fine double flowers. You may suppose that I was disappointed in the matter. Now, Mr. Editor, the question is, how are those monstrosities, the double Stocks, produced? THE CANADA FARMER is a good medium through which to instruct each other on all such points. Some people understand this matter, for we can buy seed that will be mostly double."

The Canada Farmer.

TORONTO, UPPER CANADA, MAY 1, 1865.

The Late Col. E. W. Thomson.

It is our painful duty to record the death of this truly estimable and useful man. This sad event occurred very suddenly on the morning of April 20th, the intelligence of which has cast a deep gloom over a wide circle of friends and acquaintances throughout the Province. Mr. Thomson, after taking breakfast as usual with his family, left on foot to attend a meeting of a sub-committee of the Board of Agriculture in this city, and after having walked about three miles he was seen to grasp the fence, and almost immediately to fall; life became extinct in a few minutes. The cause of this awfully sudden visitation was probably apoplexy or the bursting of a blood vessel in close relation to the vital organs of the brain or heart. Mr. Thomson had enjoyed his usual good health till within the last few months, during which time the symptoms were not at all regarded as of a serious nature; and on the very morning of his death, he said, before leaving his family, that he felt better, and left in cheerful spirits. In half an hour he was a corpse, thus affording another illustration of the oft-quoted words: "In the midst of life we are in death."

Mr. Thomson was a native Canadian, having been born in Kingston, in January, 1794; he had consequently but recently completed his 71st year. His father emigrated from Scotland to the then colony of New York before the American Revolutionary War, on the outbreak of which he took up arms in the service of his king, and came on military service to Upper Canada, where he subsequently settled. Being a man of energy and sound judgment, he obtained for himself a good position in society. He married Miss

McKay, of Quebec, also of Scotch origin, and had several sons, one of whom, Mr. Hugh Christopher Thomson, became a member of the Provincial Parliament, and was the first Warden of the Provincial Penitentiary, but died before he entered on the duties of his office. The elder Mr. Thomson's family, after some time, left Kingston and settled in the neighbourhood of Toronto, which was then only an insignificant village.

The subject of this notice during the troublous times of 1812, when only a youth, volunteered his services in defence of his country, and soon won the confidence and esteem of his superiors for his high soldier-like qualities. He received a commission for valiant services at the battle of Queenston Heights, and was selected, with Ensign Charles Denison, to receive the silk colour presented to the regiment by the ladies of York, now Toronto. He was for many years a full colonel of militia, and Col.-Commandant of the Fifth Military District of Upper Canada.

But Col. Thomson was better and wider known as a steady and energetic promoter of the most important and peaceful art of agriculture than for his military services. He was one of the most active of the few who formed the Home District Agricultural Society, —one of the earliest in the Province,—and he served as the President or Vice-President thereof for more than twenty years. He stood in a similar relation to the Provincial Association, and became its first President in 1816. He was the following year elected again to the same office, and it is not too much to say that that prosperous organization, which has done so much for the agricultural and mechanical arts of Upper Canada, owes more to Col. Thomson than to any other individual, however zealously and successfully many others have laboured in its behalf. At the subsequent organization of the Board of Agriculture, he was unanimously elected its President, a position which he continued to hold till the period of his death. Those who had a personal knowledge of the practical working of the Board, will readily and gratefully acknowledge the time and assiduous attention which the late President devoted to his duties, which were uniformly discharged in a faithful, efficient and conciliatory manner.

Col. Thomson belonged to a class of Canadians, now almost extinct, who, notwithstanding the absence in their early days of the means of liberal education, managed to educate themselves, and by their persevering industry, force and integrity of character, laid securely the foundation of the domestic and civil life of the colony. He was always the consistent and zealous advocate of our broad system of national education, and his mind was ever open to welcome light, from whatever source it might come, that would tend to dissipate the darkness which hung around both the science and practice of agriculture. In 1836, he was elected a member of the Legislative Assembly, for the second riding of the county of York, now the county of Peel, and evinced much energy and a truly patriotic spirit, during the critical time of the rebellion, in restoring peace and order on the basis of constitutional freedom. In politics he may be said to have been a liberal conservative, and as a magistrate, to have enjoyed the confidence and esteem of the public. At both World's Exhibitions in England, in the years 1851 and 1862, he was appointed by the Government as one of the Canadian Commissioners, and faithfully discharged his duties, with no small advantage to his native country. He held also several other offices of trust and importance, among which may be specified, the Wardenship of the Home District Municipal Council, on its first organization, for several years. He was President of the Farmers' Mutual Fire Insurance Company, and a Director of the Canada Landed Credit Company.

Col. Thomson was thrice married. First, to Miss Terry, of Scarborough, by whom two sons and one daughter survive him. Second, to Miss Ketchum, daughter of Jesse Ketchum, formerly of Toronto, now of Buffalo, by whom he had one son, who sur-

gives,—and third, to Mrs. Chrisolme, daughter of the late Dr. Lee, of London, C. W., by whom he leaves one daughter.

The Colonel's vacant place will long be painfully felt, at several important Boards, as also his absence at the gatherings of many local agricultural societies, to which also he devoted considerable time and attention. Being a good practical farmer himself, and having great experience in organizing and working agricultural societies, that numerous and important portion of the community had great respect for his judgment and ability. With his own hands he at one time or other performed every operation on the farm.

From the chopping and burning of the forest, to the perfectly cleared and level fields, and well stocked pastures of the most advanced colonial husbandry. He was among the first to import and advance the breeding of pure stock, of the various kinds, which are now such striking characteristics of the advanced state of Canadian agriculture.

Mr. Thomson, at various times, undertook large contracts on several public works of the Province, amongst which may be mentioned the Rideau Canal, the Credit Harbour, and the Welland Canal, all of which were executed faithfully and satisfactorily.

The writer of this hasty and imperfect sketch of the life and character of Mr. Thomson, whose intimate friendship he enjoyed for nearly eighteen years, would direct the minds of bereaved relatives and sorrowing friends, under so solemn and sudden a visitation, to the hopes and consolations of our common christianity. Mr. Thomson was an attached member of the Church of Scotland, and occupied an important position in that branch of the British Church in Canada. He took an active part in the establishment of Queen's College University at Kingston, in connection with that body, and was for some years one of the trustees of the institution. He was also for many years a Vice-President of the Upper Canada Bible Society. He closed a long, exemplary and most useful life, suddenly, but we cannot say prematurely. His work was done, and he breathed his last, it may be said, while on his way to perform a public duty. A long train of appreciating and sorrowing friends followed his remains to the grave and deposited them in a well grounded hope of a blessed immortality.

"Agricultural Education."

The above is the title of a small volume recently published by Longman & Co., London, and containing a series of lectures delivered at the Agricultural College, Cirencester, England, by the several professors connected with that institution. This little work is designed as an answer to the question, "What constitutes a sound Agricultural Education?" To this enquiry, these lectures furnish a very full and comprehensive reply.

The distinction of originating the first establishment for imparting a special education for agricultural pursuits, belongs to Switzerland. The agricultural school of Hofwyl, at which over 300 pupils were educated, was founded by Follenberg, in 1785. Since then, numerous institutions have sprung up on the continent of Europe, and in France there are several supported by the State. Throughout Prussia, there is scarcely a province that does not boast its agricultural school and model farm, and, indeed, dispersed over Germany, as well as Russia, are educational institutions, directly under the supervision and support of the State, in all of which, with slight differences of detail, agriculture is practically and theoretically taught. In Ireland, during late years, a highly successful system has been introduced by the Commissioners of National Education and at the present day, there are no less than 166 farm schools, with land attached, varying from 2 to 150 acres in extent, on that island. England has also, though somewhat distanced in this race of improvement, and even at the present time cannot boast of a State institution

of the kind. For the College of Cirencester, to the students of which the lectures under notice were delivered, owes its origin in 1815, and its support since then, entirely to private enterprise. The history of this Institution has been one of continued usefulness and prosperity; and the farm attached, which contains 500 acres, has acquired a high reputation among home agriculturists, and is in every way prosperous.

The small volume before us contains six elementary lectures, delivered to the young men attending this college, at the beginning of the term of 1863. As might be expected from an introductory course, the scope of the lectures is not extended to practical details, but confined to a statement of the broad principles by which the agriculturist must be guided, if he expects success to reward his exertions. Beyond the attainment of this individual success, however, the question of education, as applied to farming, is shown to have a wider and more important application; for it is now admitted, by the most thoughtful and enlightened minds, "that the continued prosperity of a nation depends mainly on the condition of its agriculture. Impressed with this conviction, we make no apology for inviting the attention of our readers to these lectures."

It is, perhaps, hardly necessary to refer to the causes that have operated to attract attention to the expediency of having a special education connected with farming pursuits. The mere influence of increasing population, necessarily gives an impulse to the advance of agriculture, and the ground of a more exact inquiry into its guiding principles, has been furnished by the spread of intelligence, and the rapid advance made by other sciences, on which all true agriculture must be founded. At the same time, the increasing popularity of farming as a pursuit, has of late years drawn a more enlightened class into its ranks, while the spread of publications connected with the subject, the formation of boards and societies for its promotion, and the general activity of discussion which has ensued, have all tended to draw towards it an amount of attention heretofore unknown. It is painful to observe, in spite of all these combined influences, that Canadian farmers, in too many instances join the march of improvement with extreme reluctance, and at a snail's pace. With some notable exceptions here and there, which gladden the heart, the ancient strongholds of routine, stoutly maintain it. The old-fashioned, now and ever shall be, practical English farmer, still has representatives in Canada, and the antiquated idea that less information and intelligence are required for agriculture, than for any other pursuit, still has its credulous disciples amongst us. By this class, any mention of science, requiring thought and reflection, is dismissed as "mere theory," which, being the opposite of practice, must of course be worthless—as if knowledge were a burden, and weakened the strong arm, or impaired the keen eye!

At the same time, this supposed monopoly of practical knowledge, by the unread agriculturist, is purely imaginary, and the very opposite of truth. Every profession in existence, at some time of its history, has had to defend itself from the same absurd supposition. Of course "in the infancy of every art, practice necessarily precedes science. To do, comes before to know; and in this way the parent has been enabled to teach the child, though he himself had worked out his own knowledge without the aid of a teacher." Now, the progress made in agriculture or any other art, depends on the sciences which govern it. And "all the accidents of natural circumstances, under which it is pursued, however varied in appearance, are equally subordinate to natural laws, which it is the province of science to unfold." To persist, therefore, in a course of mere "routine" farming, with the soil half tilled, the same seed sown, and the same crops following each other, year after year, is practically to deny the value of the aggregate experience of men of similar pursuits, and ignore the progress of science and improvement.

The key-note of the whole subject is struck by one of the lecturers before us, in the following words:—"The grand aim of the agriculturist, is to form the largest quantity and the best quality of food, vegetable and animal, at the least cost, consistent with the permanent good condition of the land." Whilst every

agriculturist will readily endorse the former part of this self-evident truth; there are too many who practically forget that "the permanent good condition of the soil" is of any importance. They forget that "there is no plant which spares the ground, and none which enriches it—that the success of a second crop depends upon the previous one—and that it is by no means a matter of indifference in what order plants are cultivated." The art of cultivation is not, as a casual observer might imagine, simply mechanical. Although the turning and breaking of the soil, the scattering of the seed, and the harvesting of the ripened crop, are works of bodily exertion, going on from year to year, and demanding the lowest exercise of reason; yet the occurrence in every climate, of years of deficient produce through the mere influence of seasons, and the gradual exhaustion of the soil by a continual repetition of the same crop, through neglecting to restore the elements of fertility, render unusual remedies and precautions necessary, which it is the legitimate province of science to unfold. No language is more familiar to the farmer than this. Every respectable journal of agriculture, like the CANADA FARMER, abounds with practical suggestions, (see CANADA FARMER, vol. I. p. 81,) founded on science and experience, to assist the agriculturist in restoring the elements of productiveness to exhausted soil; while, at the same time, they point out methods of manuring and rotations of crops, to avert the ruinous consequences which inevitably follow bad farming. In a field so wide as this, embracing every variety of soil, and diversity of season and climate, it would be unreasonable to expect perfect unanimity in the views of all writers on the subject; and farmers, too generally overlook this consideration when they sweepingly denounce "book-farming." They should not forget that "there is still a great extent of variety, uncertainty, and inexactness in the experience of the farmer, and it would be no proof of the efficiency of the teacher, or of the excellence of a plan of teaching, that it pretended to uniformity, consistency, and precision."

Perhaps we cannot more appropriately close our remarks, than by giving our readers an abstract, which must necessarily be brief, of the methods so successfully pursued on the Cirencester College farm. It is necessary to premise that the soil is very variable and unequal in its productive qualities; and that the system of management adopted is executed with the greatest vigilance and care. On the better portion of the land the Norfolk four-course system is followed, as far as practicable. Beans follow wheat, whilst on the lighter land, peas take the place of a root crop. By this course, an interval of six years occurs between the clover crop, and in these days of clover sickness this is desirable. In the management of the poorer soils the custom of the Cotswold farmers is not ignored—to suffer the clover plant to remain a second year, thereby obtaining a large breadth of valuable sheep food, and causing a saving of labour. The cultivation of the land is regularly and systematically carried out. No sooner is the wheat removed from the stubble than the plough is set to work, tearing it up to a depth of 12 or 14 inches. The following is a fair statement of the proportions and description of crop grown annually upon this farm:

Wheat, after clover, 80 to 120 acres. manured before spring, 8 tons.

Wheat, after turnips, 20 acres: corn spent on lands.

Barley, after turnips, 80 to 100 acres: corn spent on lands.

Oats, after turnips, 15 to 20 acres. corn spent on lands.

Beans, after wheat, 10 to 20 acres: manured in winter, 12 tons.

Peas, after wheat, 10 to 15 acres: manured sometimes, 10 tons.

Early turnips or rape, 15 to 20 acres: artificial manure, 3 cwt.

Grey top turnips, 10 acres: artificial manure, 3 cwt.

Mangold, 15 acres. manured with dung, 10 tons; remainder artificial manure, 3 cwt.

Vetches and rye, 15 acres: manured 10 tons.

The custom has been to top dress the wheat in early spring with 1½ cwt. or more of nitrate of soda, a treatment which has considerably increased the yield; while the cleansing of both cereals and roots is vigorously persevered in, whenever it is possible to hoo them.

POMOLOGICAL CONVENTION.—The Montreal Horticultural Society, proposes holding a Pomological Convention, during the Exhibition week of the Lower Canada Agricultural Board. They propose inviting all the Horticultural Societies throughout the Province to unite in making an Exhibition of fruit. We wish them hearty success in this enterprise, and hope the Societies of Canada West will give them countenance and support.

New Publications.

"A PRACTICAL treatise on Consumption, Bronchitis, Asthma, and kindred diseases, by J. Rolph Malcolm, M. D., Toronto."

A copy of this little work now lies before us, and we cannot but approve of the aim of the author in his endeavour to "instruct the people" in the earlier symptoms of those diseases which are devastating the whole civilized world to so great an extent. A statistical table on page 21, informs us that "in Canada, one-fourth of all the deaths from disease are from these." We were not aware that the percentage was so large; but from the facilities for obtaining information on the subject, possessed by the author, we have not the slightest doubt of the accuracy of his statement. Not the least interesting chapter, is one on the "prevention of consumption" in the several periods of infancy, childhood, youth, and adult ages; a chapter which all mothers would do well to study, as "prevention" is universally acknowledged to be "better than cure." The chapter on the "treatment of consumption," compares the effects of the various methods of treatment "through the stomach," "through the skin," and "through the lungs," by medicated inhalation. The author holds that the last mentioned one is by far the most effectual, inasmuch as by it the remedies act directly on the diseased part, which indeed appears very rational. If we may judge of the success of the practice from the testimonies of those who affirm that they have been cured by it, and by the numbers who are daily patronizing it, a revolution must be going on, in the opinions of the public as to the "curability of consumption." Although farmers are shown by the treatise to be less liable than any other class of men to an attack of consumption, we would recommend them all to read this publication, as it contains much really valuable instruction.

REPORT OF THE HAMILTON HORTICULTURAL SOCIETY.

—The Fifteenth Annual Report of this Society has come to hand, and we make a few extracts as follows:—

"The three Exhibitions held during the past year, under the auspices of the Society, were attended with the most gratifying results. A considerable increase having taken place in the membership, the Directors were enabled to add materially to the amount of prize money offered for competition. And as the amateur members here of late years shown an increasing interest in the Society's operations, and a growing desire to avail themselves of the opportunities afforded them of entering for prizes, it was thought that the largest additions should be made to the amateur department of the prize list. A very considerable addition was consequently made in this department, and the result is shown in the entry books of the Society, which now contain the names of many additional amateur exhibitors. Some of the members of your Board have had the privilege of examining the manuscript of an unpublished work by Mrs. Traill, on the Native Trees, Shrubs, and Flowering Plants of Western Canada; and they were very much pleased with the amount of research displayed by the talented authoress, and the very pleasant and interesting way in which she conveys a vast amount of valuable information on a subject of so much importance to the members of this Society. A suggestion was at one time made to your Directors that they should take some steps for the purpose of having this work published, but nothing of a definite nature was ever agreed to. They trust, however, that the project will not be allowed to drop, and they recommend the subject to the careful consideration of their successors."

"ALL ABOUT PETROLEUM."—We have received two numbers of this weekly journal, which is devoted to the development of the petroleum interest. It is published by C. Pürshing & Co., 34 Liberty Street, New York, at \$5 per annum.

"THE TOBACCO LEAF."—This is a new weekly, published by the same firm as "All about Petroleum." It is intended as the organ of the tobacco trade of the United States, and is furnished at \$1 a year.

SPRING AND AUTUMN SALE LIST.—We have received J. Fleming's annual Sale List of Dahlias, Verbenas, Fuschias, Geraniums, Gladiolus, Bulbous Roots, select green-house Herbaceous and bedding-out Plants, Grape-Vines and Small Fruits. The collection advertised is very large, and embraces many new and choice things.

Spirit of the British Agricultural Press.

THE JONAS WEBB MEMORIAL.—At a recent meeting of the subscribers to the Jonas Webb Memorial, it was resolved to erect the statue in Cambridge.

THE ART OF WALKING.—A series of articles on this subject has been appearing in the *Mark Lane Express* under the title, "On the Mechanical Process of Biped Progression."

BONES.—Liebig recently protested against England's greedily consuming the bones of Europe. In the eleven months ending Nov. 30, 1864, 62,897 tons of bones (whether burnt or not, or as animal charcoal), were imported into the United Kingdom.

CROSS BREEDING.—As regards cross breeding of cattle, Mr. Spooner thinks that there is a direct pecuniary advantage obtained by it; inasmuch as increased size, a disposition to fatten, and early maturity, all follow in its train.

SIGNS OF A PROPENSITY TO FATTEN.—Prof. Tanner states that in cattle a sound constitution and a disposition to fatten economically is shown where the head is rather small in proportion to the rest of the body: if it is well set in the neck: if it has a fine tapers muzzle; a bright, full and placid eye; graceful, well-turned horns, with the ears small and fine: the neck should be thick, and not too short; it should have a graceful look, and taper uniformly to the head; yet not be too thin behind the ears. The head of the bull should be, of course, more masculine than that of the cow, more erect, finely set on to the neck, and arched at the crest.

BRITISH AGRICULTURAL IMPORTS.—There were imported into Great Britain, during the year 1861, 179,507 head of cattle, being 69,854 more than in 1863; and 496,243 sheep, or 57,455 more than during the previous year. Of hops the imports were only 98,656 cwt., against 147,281 in 1863; of butter 1,054,617 cwt., against 986,708 in 1863; of cheese 834,844 cwt., against 756,285. Eggs were imported to the number of 3.5½ millions in 1861, against about 267 millions in 1863. There were imported in 1861, 203,809,011 lbs. of wool, against about 174 millions in 1863—an increase of nearly 30 million lbs. As to wheat (flour and grain included) the imports of 1861 were equal to 196,956,544 bushels; of 1863, 208,560,256 bushels; of 1862, 347,520,352 bushels.

ALTERATION OF CLIMATE.—We learn from *Bell's Weekly Messenger*, that at the last meeting of the Meteorological Society, Mr. Glaisher gave some interesting facts relative to the mean temperature prevailing during certain periods. From these, the striking and curious conclusion is drawn, that the climate of Britain has changed in the last hundred years, that the mean temperature of the year is now two degrees higher than it was 100 years ago; that the month of January is nearly three degrees warmer; and that frosts and snow-showers are of very much shorter duration, and less in amount. The present season would seem to indicate that we are going back to "old style."

VALUE OF COW DUNG.—Thaer, in his "Principles of Agriculture," says that (1) One cow or ox will yield 10 loads of dung for a two-horse waggon. (2) One young ox or cow will yield 5 loads of dung for a two-horse waggon. (3) One horse fed in the stable yields 15 loads of dung for a two-horse waggon. (4) One horse turned out to grass yields 7½ loads of dung for a two-horse waggon. Allowing, as this authority does, 20 loads of cattle dung per acre, 18 of horse dung, and 20 of mixed manure, we find an ox yielding manure for half an acre, a young ox or cow will yield manure for quarter of an acre, while a horse fed in the stable will yield manure for five-sixths of an acre. Taking the value of farm yard dung as the standard at 100, Professor Johnston estimates the value of the mixed—i. e., solid and liquid—excretion of the cow at 98, of the horse at 54, of the pig at 61. The liquid excretion of the cow at 91, solid ditto 125, liquid excretion of the horse 16, solid ditto, 73. A cow fed in the house voids 60 lbs. of liquid excretion in the day.

"GOGGLES" IN SHEEP.—The following is from the Report of the Veterinary College, Camden Town, England:—"Two sheep, subject to the disease known in Sussex by the vulgar term of 'goggles'—a name probably given from a peculiar expression of the eye of the animal, especially in the advanced state of the disease—have also been received. The affection proved fatal in both instances after the animal had been about a month in the infirmary, and although a most searching *post mortem* examination was instituted in both cases, the precise nature of this singular disease remains to be ascertained. The term 'goggles'

has been used as synonymous with vertigo, the malady in which a hydatid exists in the brain of the animal; the cause of the vertigo, however, is patent; but that of the other disease is still hidden. Many practical agriculturists assert that the disease is hereditary, and, if once introduced into a flock, can never be eradicated except by the destruction of the whole flock; they also hold the opinion that the disease occasionally passes by the immediate offspring, but shows itself in the second or third generation. These facts and opinions prove the necessity of further research; but this cannot be carried on successfully without the co-operation of flock masters, since a long continued series of experiments and observations may be requisite; the governors therefore would be glad to invite through the intervention of the council, the attention of sheep owners to this subject, in the hope that some may be found who will afford the requisite facilities for investigation."

THE SPRING AND SUMMER OF 1865.—A weather prophet writes *Bell's Weekly Messenger*, under date of March 25, as follows:—

The winter being unusually long and severe, the public will now be anxious to know what sort of a spring and summer is likely to follow. I have studied the weather nearly 40 years, and have kept a register upwards of a quarter of a century, and beg to offer the following opinion of the approaching season. Cold, with prevalence of northerly and easterly winds, will, I apprehend, rule for a considerable time. The mean temperature of several weeks to come will be very much below their proper average. April will, therefore, prove a cold month. It is my opinion that we shall have a very hot summer—maximum and mean temperature superior to any we have experienced since the year 1859. Of the probable rainfall I do not attempt to give any opinion. The British rainfall is so irregularly distributed that no anticipatory calculations can be made with any degree of reliance."

POULTRY AND EGG PRESERVING COMPANY.—An enterprising individual in England, believing that poultry and eggs can be profitably produced for the market on a large scale, has issued a prospectus and plans for the formation of a company. Should this project be carried out, some light will be thrown on the much-debated question, "Can poultry be bred and eggs furnished profitably?" A correspondent of the *Collage Gardener* comments on the scheme as follows, and we confess that we are very much of the same mind:

"My own opinion, gathered from personal observation, is that a large number of fowls cannot be kept in one spot without serious detriment to their health and profitable employment; that the profits arising from them do not increase in proportion to the number kept; and that no appliance, however ingenious and seemingly well adapted to the purpose, can possibly compensate for the loss of the natural parent. The instances of the chicken during the most critical period of its existence are feeble; it requires not only the sheltering warmth of the mother's wings, but the mother's watchful care, her affectionate warning, advice and instruction. No artificial contrivance can provide these. We may hatch eggs, but we cannot successfully rear chickens by machinery."

THE "TARNISH" OF MONEY-MAKING OCCUPATIONS.—The Principal of the Cirencester (Eng.) Agricultural College, in his opening address, recently, while taking the position that the study of the dead languages was not essential in the education of the young farmer, went on to say:

To assert this, is not for one moment to deny that, for the higher forms of success in all employments, the long-established and recognized basis is the best—it is merely to say polish is not the chief object in middle-class education; indeed, it may be questioned whether scholarship and polish are not to a certain extent alien from all money-making occupations. So soon as ever the scholar descends to the tradesman, you will detect the tarnish in his deportment, it is vain to endeavour to disguise the fact. Educators, however high their attainments, carry the impress of their calling wherever they go; and those having the softer and more cultivated dispositions know well, that to revert to the classic tastes of youth, and to reassume the garb of the true gentleman, the money-maker's tools must not be in their possession for too long a period."

We are glad to find the *North British Agriculturist* strongly dissenting from this course of remark, and contending that there is sometimes to be observed an innate gentlemanly bearing which academic training does not always impart, while the pedantry of the college occasionally becomes so dictatorial as to be offensive. Any view of things which in effect assumes that the tradesman and farmer cannot be gentlemen, deserves to be scouted.

The Apiary.

Another Good Bee-hive.

In No. 7, vol. 1 of this journal, we gave two illustrations, and a pretty full description of a bee-hive made by Mr. P. A. Scott, of this city, on the principle of the celebrated Langstroth hive. Many who have purchased the hive in question, speak highly of it, and there can be no doubt that any hive constructed on the moveable-comb principle, is a vast improvement on the old-fashioned hive. This principle admits of a variety of modifications, and there are now several styles of hive before the public, which, though agreeing in the moveable-comb feature, differ in various details. We rejoice to note an increasing interest in bee-culture, not only in this country and the United States, but also in Britain. This is very much owing to the increased facility of management which the moveable-comb hives afford. In addition there has been much advance in knowledge of the habits of bees, and of the best means of handling and managing them. Intending bee-keepers have now every advantage within reach. There are books which give the theory, hives which place the bee under observation and control, bee-hats, bee gloves, smoke-pipes,—and plenty of examples of success, to encourage beginners. Honey is so delicious a luxury and the ways of bees are such an interesting study that we are only surprised that every family has not one or more hives.

We have now the pleasure of presenting our readers with two illustrations of Thomas's Moveable-comb Observing Bee-hive, which has been already alluded to several times in these columns, and for which the proprietors claim the following advantages over the Langstroth hive.

1st. It is not so broad and shallow, but deeper, and so allows the bees to carry their stores farther from the entrance, and at the same time form a natural cluster, which is from eight to ten inches in diameter. In the Langstroth hive, the bees cannot form a natural cluster without coming in contact with the bottom board where it is too cold. Says Langstroth: "a hive, tall in proportion to its other dimensions, has some obvious advantages;" Honey Bee, pp. 329, 330. Says J. S. Harbison, "many eminent apiarists bear testimony to the superiority of deep hives over those that are low and shallow;" Bee Culture, p. 132.

2nd. The top piece of the comb frame is of a shape better calculated to guide the bees in building their combs straight.

3rd. The comb-frame bearings are far superior, being beveled to a sharp edge, on which the frames rest, which prevents the bees from gluing them fast.

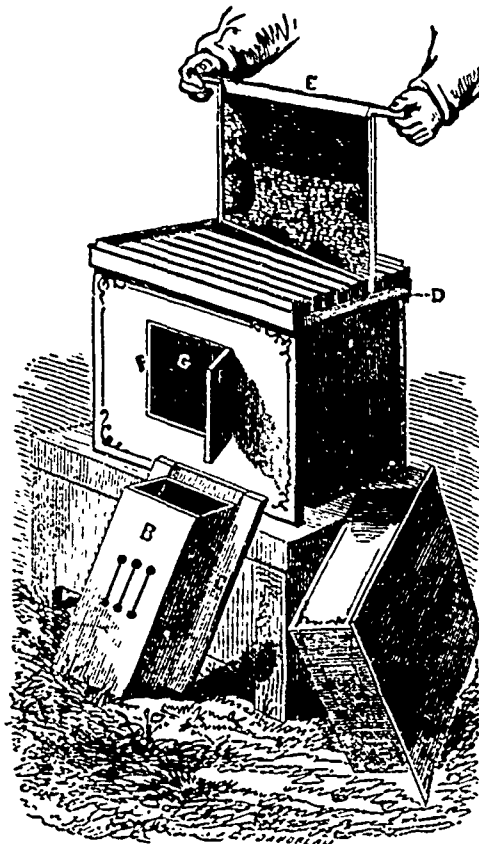
4th. The comb-frame stops are a great advantage over the Langstroth hive, which has nothing to hold the frames in place.

5th. The flat projecting ends of the comb-frame are also a great advantage, as the apiarian is able to take hold of the projecting ends, to raise the frame out of the hive, instead of taking hold of the frame in among the bees.

6th. The revolving bands are an additional point of superiority: First, by allowing the bee-keeper to remove the frames with far less difficulty, and in one quarter the time. Secondly, as soon as the bees commence to work in the honey box, they may be turned down, forming a lighting board, giving to the bees a short route to the honey box, whereby they are enabled to lay in honey much faster.

7th. The swiveling and adjustable bottom is superior, allowing the hive to be cleaned of all dead bees or miller grubs that may be on the bottom board.

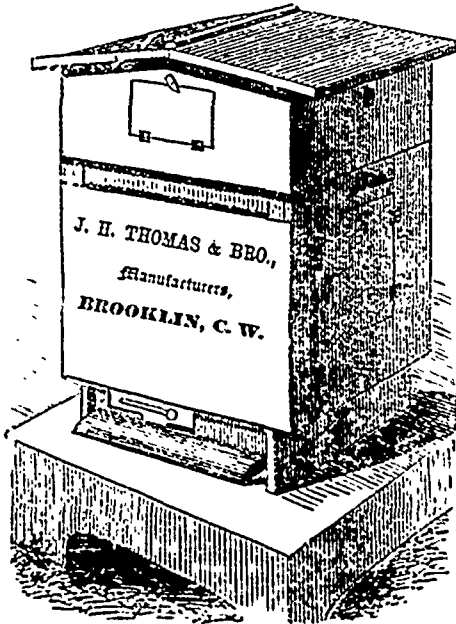
Our first illustration conveys a good idea of the interior economy of this hive, and the list of advantages just given, will enable all to understand what is aimed at in the mode of construction. Our second illustration shows the outward appearance of the Double



- A. Removable Cover.
- B. Honey Box for surplus honey.
- C. Honey Board on which the honey-box rests.
- D. Revolving Band.
- E. Comb Frame removed.
- F. Observing Door.
- G. Glass.
- H. Rubber Stop—metallic or tin slide.

Boarded or Self Protecting Hive, which although the same as to inside arrangement, differs from the Single Boarded Hive in the following respects.

First. The frames are deeper, (as the hive is a little larger), which allows the bees to carry their stores still farther from the bottom board. Secondly. The



front end of the bottom board is stationary, and a passage of two inches only is allowed. This is considered a great improvement, the moth not being so likely to get into the hive as the small passage, found to be sufficiently large, will be better guarded—Thirdly. The metallic or tin slide is also an improvement, by sliding one way the drones are effectually shut out, sliding the other allows them to enter, standing in the centre the bees are shut in. Fourthly. The

Double Boarded Hive has a hollow wall all around the bees, made by putting an outer layer of boards over the Single Boarded Hive. In summer they are cooler, no combs will melt down in a Double Boarded Hive. This has been proved. They are warmer in winter, and better for wintering out of doors. The hive best for all purposes, is a Double Boarded Hive without observing doors. It has the metallic slide fastened with thumbscrews for purposes above stated. The slide is also useful to prevent robbing, as the passage may be contracted so as only to admit a single bee at a time. Henceforth all the hives made by the Messrs. Thomas will have this last provision, and be interiorly of the same size as the Double Boarded Hive here represented.

Rural Architecture.

Farmer Cheeseman's New House.

FARMER CHEESEMAN had toiled away for fifteen years upon his farm, and had laid by enough to build him "the new house" which had been the goal of his aspirations, for all those years. It must be a fine brick one, with a flat roof, such as a cousin of his had built in the neighbouring town. So the plan was made and the workmen set about it in earnest. There were all sorts of "graining" done in paints on the various doors and window casings, and elaborate, crooked stripes of red, green and yellow adorned the sides of the fire places and mantels, supposed to represent veins in marble. It would have puzzled a geologist, though, to tell exactly where to classify such a specimen. The parlor had a ceiling finely ornamented with a wreath in stucco work, and the windows were shaded by paper curtains, whereon was a brave picture of some famous general, mounted on a dashing charger. They were somewhat scant in length, so they were tacked on to the casing about a quarter of a yard from the top, so that they should be even at the bottom.

"Them are the dandies," said the complacent mistress of the mansion to me, as she was going over the house to show off its beauties. I fully agreed with her.

The rooms were many and of ample size, but a great perplexity arose when it was all completed and furnished—it was all too good to be used—a very unfortunate dilemma, as the old weather-beaten house they used to occupy had been torn down. However, a remedy could be found. It would not cost a great deal to build on an addition that would be mean enough to live in. They could furnish it coarsely, and then it would answer to cook and eat in, just as they used to do, and save the new house. It never would do to let the children and hired men take their meals in that fine, airy dining-room. All the new would wear off in a little while. So the plan was carried out, and the family toasted away all through the summer beside the great cooking stove, and ate from the pine table, and sat in unpainted chairs, while the great state room adjoining was as empty and useless as if it had been in California.

I do not doubt but every reader knows some such economist; and those who do not go to quite such an extent sometimes show the same penny-wise spirit, in keeping all the best of the house and possessions for chance visitors a few times a year, while the family comfort and pleasure are little thought of.

Oh! throw open those dark and useless parlors and let your children have the benefit of a pleasant sitting-room. Do not expend a great sum for one or two expensive articles that might buy a dozen to add to the real comfort of your family. Do not save up the best chambers for company and think "the children can sleep anywhere," but give your boys and girls nice, airy rooms, if you have them. Nothing will serve more to make them cherish the memory of home with pleasure, and it will do much towards helping them to form good habits of order and neatness.

Do not have so great a regard for "the eyes of the people," which "cost us so much," as for the happiness and welfare of your family. Who should you like to have share and enjoy your good things, if not those who are dearest to you of all others?—Working Farmer



The Hemlock.

It is often objected when tree and ornamental planting are urged, that these objects though beautiful and desirable are costly, and that the money needed for them is not at hand. But many forget that for some of the choicest ornaments of the lawn or shrubbery, no outlay whatever is required. In many localities, there are to be found in a wild state, shrubs and trees fitted to grace the garden of a Prince. Among these may be named the hemlock, decidedly the handsomest of the Evergreen Family. Its graceful appearance, the delicate green of its foliage, its varied colours when the young shoots push forth, and its hardiness, commend it to the attention of all who have a home to beautify. It looks well singly or in groups, and as it bears both shade and pruning well, it is an excellent tree for screens and hedges. It grows rather slowly when first transplanted, but once established it flourishes luxuriantly. Removed from a mucky swamp to upland, it requires only ordinary care to make it bear the change remarkably well. Though it does best in moist land, it soon accommodates itself to ordinary soil. We would say to our readers try the hemlock.

Perennials.

This class of plants do not require the expense of purchasing, or the trouble of planting year by year, and there ought to be a good proportion of them in every flower garden. The *Gardener's Monthly* gives the following list of six kinds, flowering during the summer months, to which many others may be added,—and among them the Phloxes and Sweet Williams ought by all means to have a place.

"While caring for the annuals and grasses, we hope the hardy herbaceous plants will not be forgotten. We give a list of six good ones, for flowering near each of the months annexed. April—*Iberis sempervirens*, Double Daisy, *Phlox subulata*, *Dicentra spectabilis*. Snowdrop, the Forget-me-not or *Myosotis palustris*. May—*Polemonium reptans*, *Omphalodes verna*, *Funkia alba*, *Geranium sanguineum*, *Fraxinella*, *Aquilegia canadensis*. June—*Achillea tomentosa*, *Dodecatheon Meadia*, *Funkia cerulea*, Iris of sorts, *Lychnis fulgens*, *Pentstemon rosea*. July—*Zauchneria Californica*, *Wahlenbergia grandiflora*, *Spiraea japonica*, *Potentilla atrosanguinea*, *Lychnis Chalcedonica*, *Campanula persicifolia alba*. August—*Achillea Ptarmica*, *Clematis revoluta*, *Chelone barbata*, *Delphinium formosum*, *Lythrum salicaria*, *Liatris spicata*. September—*Sedum populosifolium*, Double Dwarf Sunflower, *Anemone japonica*, the Lilies, *Dracocephalum Virgineum*, Asters. There are besides a great many other beautiful species, and which others might think even more beautiful than those we have named, but these will at any rate form the nucleus of a good collection."

"MY GRAPE VINES, AND WHEN THEY RIPPENED."—A correspondent of the *Horticulturist* supplies the following brief note of his grape experience last season:—

- "*Hartford Prolific*—ripe 25th August. This variety is popular with my family and friends, and a good bearer—drop easy.
- "*Rebecca*—ripened at the same time. This grape is a favourite; a beautiful leaf, early, very pleasant, and prolific; skin rather tough.
- "*Concord*—ripe Sept. 4th. This variety, I think, is one of the best. An abundant bearer, large, and good flavour.
- "*Delaware*—Sept. 8th. Best of all. Enough said.
- "*Union Village*—Sept. 10th. A pleasant grape, but its location is poor with me.
- "*To Kalon*—Sept. 20th, ditto.
- "*Diana*—Sept. 20th. Stands with us next to the Delaware, and the last season did the best.

"*Isabella*—Sept. 28th. Fine exposure; good.
 "*Catawba*—does not ripen well with us, though they bore well the past year, and we enjoyed them after the others were gone.
 "Under the best circumstances, for out-door culture, I tried the Black Hamburg and Brinkle, and I am quite satisfied, that under glass is the place for these.
 "My other vines, Iona, Israella, Lincoln, Adirondac and Allen's Hybrid, have not come to bearing."

Cultivation of the Strawberry.

NORMAN can be easier than strawberry culture. It only requires the knowledge and observance of a few very simple rules. The first is: *Get good plants.* It is folly to bestow care and culture on a worthless berry. Many persons, to save a little outlay, beg a few plants, without any assurance that they are worth growing. The result, often, is disappointment, and a prejudice against this choice fruit. There are some varieties of the strawberry that are good, but require fertilizing with other varieties. But there are enough perfect berries to render it unnecessary to be troubled with any of this sort. We have tried a large number of strawberries, but have banished from our garden all, except the following:—Wilson's Albany Seedling, Triomphe de Gand, Vicountess Hericart, and Great Austin. The first-named is, perhaps, the best for general culture. It has only one fault, and that is a slight acidity, but even this is hardly perceptible, if the berry is left until dead ripe. The Great Austin stood the frost and drouth of last season better than any other kind in our possession. There are various opinions about the Triomphe and Vicountess. We can only speak in the highest terms of them both, especially the latter. The best mode of planting out strawberries is very concisely given, together with some illustrative cuts, in the following extract from the *Annual Register of Rural Affairs for 1865*:—

"Early in the spring is the best season for setting out strawberries. If the work is done well they will bear a moderate crop the same season, and a heavy one the next. The best plants are the well-rooted runners from last autumn. They should be well taken up, so as to secure all the fibres, lifting the roots out with a spade and shaking the earth carefully from them; if pulled severely by the hand the roots will be torn off. The older and dead leaves should be cut off from the plants, and the roots trimmed to about two and a half inches long. For ordinary field culture they may be set out with a dibble (fig. 1), care having been previously taken to immerse the roots in mud, to prevent drying. But, for garden culture, it is better to spread the roots out like the frame of an umbrella (fig. 2), and set them in a hole broad enough, with a small mound in the centre on which



Fig. 1.—Strawberry plant, set out with a dibble, or in the common way.



Fig. 2.—Strawberry plant, set out by spreading the roots.



Fig. 3.—Hole for setting the spread roots of a strawberry plant.

the spread roots rest, and form a cap, as shown in fig. 3."

The after cultivation consists chiefly in keeping the runners cut off, except those you wish to propagate, and destroying weeds. No weed should be allowed to show its head in a strawberry patch. Each strawberry plant should be kept distinct, and no matting together allowed. For garden culture, beds four and a half feet wide, containing three rows, are very convenient. The plants should be about a foot apart in the rows.

The Lawton Blackberry.

To the Editor of THE CANADA FARMER :

SIR,—I saw in your issue of March 1st, an article in relation to the Lawton Blackberry, and having had some experience in its cultivation, I will give it you. I have fruited it here for the last five years, without any winter protection, and during that time have not failed to get a crop, though that of last year was rather small (about 300 quarts from a little over half an acre), owing in part, to the extreme cold of the previous winter, which froze the ends of the plants, and the drouth of the summer. The year before, I had from the same patch, which was just beginning to bear, about 2,000 quarts, and I am fully satisfied that with good cultivation in an ordinary season, 5,000 quarts could be raised to the acre. In regard to its hardiness, I think if properly trained, it is a good deal hardier than the peach. I should think as a rule, it would be safe to say that wherever the peach tree (to say nothing of its fruit buds), would stand the winter, the Lawton would flourish, for unless the canes are killed you are pretty sure of a crop of fruit; and I consider them as hardy as the wood of the peach, if they are cut back as they should be, and made to mature. My method is to select 3 or 4 of the thickest canes which come up in the spring, and train them up, keeping all the rest of the young shoots cut down,—and about the first of September, head these in three or four feet from the ground, thus checking the sap and sending it into the side branches, making the plant more stocky, and maturing the root. I have always found a ready sale for the fruit; the price averaging here at wholesale, from eight to ten cents per quart. The only objection to it as a market fruit is that it will not bear transportation far, when fully ripe, and when not ripe, is too sour for the palates of most people. Many have condemned it the first trial on this account. It turns black before fully ripe, and they have picked it green and pronounced it not fit to eat, when if they had waited until it was quite ripe, they would have called it delicious. I think it could be made profitable for market, near any large town, where it could be picked and taken in the same day. At all events, I think any one who has a piece of ground where peach trees will grow, would not regret raising a few for his own use,—for it is, to my taste at least, when fully ripe, a luscious fruit, and is generally acknowledged very wholesome, besides it begins to ripen when there is very little other fruit, and lasts till frost comes.

Grimsby, C. W.

A. M. S.

Flower Farming.

TAKE a pair of compasses, and strike an arc on the map of the French shores of the Mediterranean, making the Fort of Antilles the centre, open the compasses to Nice, and strike around—the highest point will be Grasse. Then, descending again to the shore in an opposite direction, the compass leg will mark the fringe of the Estrelle hills, and the well-known town of Cannes, with Lord Brougham's villa. From Nice to Cannes it is twenty miles, and from Grasse to the shore ten miles. The three towns form a geographical triangle, having the tideless blue sea for its base. Within this triangle is the valley of the Flowers Farms. There are flower farms in England also, but they are insignificant in comparison with those of France. Elsewhere flowers are ornaments—charming accidents. Here they are staples. They grow like grass or corn, like potatoes or mangel-wurzel. Here bloom the jasmine, the orange, the violet, the tuberosc, the jonquil, the rose, the cassia, not as in our beds, not as horticultural gardens, not as gardens, but as fields. Broad acres of colour flash under the hot sun. The atmosphere is heavy with perfumes when the snows are melting on the mountains, and the gurgling Var is rapidly growing into a roaring torrent. Here we enter homesteads not of golden grain, but of lavender sheaves; not of cheese, but of olive oil; not of beer and elder wine, but of orange-flower and rose water in vats; not of clotted cream, but of jasmine and violet butter. It is like a country of the "Arabian Nights." You expect the dark-eyed peasant to answer you in lyrics, and the very dogs to bark in tropes. You are oppressed with the prodigality of splendor. The soil is so fertile that, to borrow Douglas Jerrold's witty conceit, if you tickle it with a hoe, it smiles with a flower; or, as the natives say, if you plant a walking-stick, the forule will blossom.—"Dr. Septimus Piesey," in *The Cornhill Magazine*.

Grape Vine Culture, No. VI.

BY W. S. WORKS.

THE SORTS TO PLANT.

THERE are many varieties of native vines, some more or less suitable to various localities, from the extreme South to the furthest limit of northern latitude where the grape will grow profitably. A very limited number of these sorts are more particularly suitable for our northern climate. The Fruit Grower's Association of Upper Canada have agreed on four sorts as the very best, and we approve of their selection. In THE CANADA FARMER for April 1, 1861, page 93, we described several of those suitable for the Northern States, as well as Canada, and in order that new subscribers to THE FARMER for the present year may have the information, and that old subscribers may have it at hand, we repeat the brief descriptions there given of the four varieties approved by the Association:

CLINTON.

This is a vigorous and exceedingly hardy and productive variety. Bunches medium size, very compact; berries small to medium; colour black; flesh rather acid, with an exceedingly brisk and sprightly flavour; ripens middle to end of September, two weeks earlier than the Isabella.

CONCORD.

Bunches and berries very large, almost black, thickly covered with beautiful bloom, very hardy, second only to Delaware, and exceedingly vigorous and productive; much less liable to mildew than either the Isabella or Catawba. Similar in quality to the Isabella, but ripens two weeks earlier.

DELAWARE.

This is exceedingly hardy, early and productive; perhaps the very best of all the hardy American varieties. It is very delicate, sweet, sprightly, and of high vinous flavour. It has been known to stand the severest northern winters, beside which the Isabella and Catawba were killed out. It ripens fully three weeks earlier than the Isabella.

HARTFORD PROLIFIC.

Bunches large and compact; berries large, round; skin thick and black, very juicy and sweet. An exceedingly hardy and productive variety. Ripens two weeks before the Isabella.

WHO SHOULD PLANT.

Every person who owns land should plant more or less of the grape vine who may desire a profitable crop, and who may at the same time be willing to bestow the necessary care and attention to their cultivation. But we remind all such, that to produce the best results constantly, vigilance will be required. Nothing must be left to chance; plans must be matured in advance; the location must be a proper one; the ground must be very carefully prepared, extreme depth of trenching and very heavy manuring is in most cases unnecessary, in many instances injurious; there must be a proper exposure to the sun, proper shelter provided against tearing winds, sedulous care must be exercised in mulching, to prevent frost injuring the roots in winter, and to ensure proper humidity during the droughts of summer. The greatest care and pains must be taken to train, pinch, and prune correctly. And as no written instructions, without some actual practice will be sufficient, with at least the majority of mankind, it is recommended that caution be exercised not to plant very extensively, until after a few years practical experience may be had. Of course mistakes, losses, and failures more or less will have to be encountered in the first instance, but ample success will finally reward untiring painstaking, and indomitable perseverance: if there be those who may think all these conditions too hard to be attempted, we do not advise such persons to try grape growing.

Culture of the Cranberry.

We have had some enquiries on the above subject, and by way of giving a full and exhaustive reply to them, we make the following extracts from a circular issued by B. M. Watson, of the Old Colony Nurseries, Plymouth, Mass., one of the most successful cultivators of the Cranberry, in the United States.

"The success of this fine fruit in upland garden cultivation is now completely established. In fact

its cultivation is much more easy, economical and successful in the dry soils of Private Gardens, Market Gardens, and in field culture, than in the usual clammy way in bogs and meadows. It requires no more moisture than is contained in all arable land. The plantations at this establishment are on dry sandy loam, and the yield the last season, under my improved method of culture, was over 100 bushels per acre, or more than double the ordinary crop in meadows. The fruit is larger, darker colored, more solid, and of better quality than the wild fruit, and ripens earlier and more thoroughly, being exposed to the sun and air. It also keeps better. The great danger of being cut off by September frosts is entirely obviated in my method, as the fruit nestles in among the leaves, entirely protected from the frosts, so that it may remain on the vines till there is danger of the ground freezing. Common early frosts do no injury whatever. Fruit left on all winter is equally good with those "Spring Cranberries" picked in the bogs in April and so highly esteemed.

The Cranberry is a hardy trailing evergreen shrub, found both in swamps and on high land, but is most productive on upland, sandy loam, well enriched. Although it is commonly thought that it naturally grows only in wet land, nothing is more common than to find luxuriant patches of the Cranberry in every variety of upland soil. Cole, in recommending its cultivation in his excellent "Fruit Book" says: "Where a gravelly knoll has been reduced for a road, we saw excellent cranberries growing on a dry, hard and poor soil. On another spot we saw fine fruit by the roadside, on a very poor, dry, hard soil." He adds, "with these cases of good crops under every disadvantage, it would be surprising if cranberries should not grow well on high land, under good culture."

In England and in many parts of Europe, according to London, our American Cranberry has been found in gardens for nearly two centuries. A recent correspondent of the "Genesee Farmer" says: "My cranberry garden is on sandy loam. Before being cleared, it was timbered with hemlock, beech and maple, after being cleared, the natural growth was sorrel, June grass and white clover. When cultivated, it produced good crops of potatoes and oats. My opinion is, that almost any soil that is not inclined to grass over without seeding, will grow full crops of cranberries. I prepare the ground by plowing deep—bringing as much of the sub-soil on too as I can. Harrow and work as for corn." A writer in the "Maine Farmer" says his crop grown on loam in 1863, "was at the rate of 453 bushels per acre." Other statements of the kind by experienced cultivators may be constantly met with in the leading Horticultural Journals, showing how rapidly the cultivation of this plant is extending.

GARDEN CULTIVATION.—Prepare the ground by deep ploughing, or spading, and enrich it well in the usual way, or with a compost of two parts swamp muck and one part wood ashes. Bone dust is an excellent application, say one pound to the square yard. In April, May or June, or in October and November set the plants four inches apart, in rows six inches asunder, in beds four feet wide. Two square rods will yield four or five bushels and require 2000 plants. The vines will soon cover the ground, and require no renewal, as the plant is a perennial shrub. The Cranberry is one of the best plants for garden edgings, or for broad belts, or borders for the principal walks. It is easily trimmed and kept in order, and is always attractive, in bloom, or in fruit, and being an evergreen in winter. For edgings plant six inches apart in double rows four inches asunder. For belts and borders which may be one half to two feet wide, plant as above directed for beds. As soon as it is known how easily every family may grow its own cranberries the cultivation of this wholesome fruit will be introduced into every garden. It is in eating from September to June.

FOR MARKET GARDENS AND FIELD CULTURE.—Prepare the ground by thorough ploughing and manuring as in garden cultivation. New and virgin soils will not require any dressing. During the months of April, May and June, or in October and November, set the plants five or six inches apart, in double rows, three feet asunder. These double rows are to be four inches apart, and the plants should be set as a hedge thus:

There being nearly three feet of space between the rows the ground can be kept clear by the horse-hoe, at small expense. In a year or two the ground will be sodded over, when further cultivation will be unnecessary. Sixty thousand plants are required per acre. The usual crop on old exhausted soils appear to be about 400 bushels per acre. I have no doubt, however, that on new and fertile soils, the yield could be easily carried up to 600 bushels, or even 800 bushels. As the fruit is worth \$3 to \$4 per bushel, it is the most profitable fruit grown.

FOR SWAMP CULTURE.—The mode of planting is the same as above; but of course the preparation of the ground must depend upon the condition and character of the swamp. The great point in swamp cultivation is to make the land as dry as possible. Mr. Plancy in his excellent paper, in the Report of the Secretary of the Board of Agriculture for 1863, says: "If the ground cannot be drained at least eighteen inches below the general surface, the situation must be rejected." It is much better to plant on dry ground and avoid the heavy expense of draining.

THE TREE CAPE COP VARIETY, is by far the best in cultivation, and succeeds best in uplands. There are several sorts in the market known as "the Bell," "the Cherry," and many other fancy names which do not compare with this in real, practical value.

PROPAGATION is simple and easy, by layering in August. Cover the now rapidly growing vines with an inch or two of soil, and they root at once making perfect plants for the next season. It is an easy plant to transplant, and is entirely hardy in the coldest climate, without covering.

GATHERING THE CROPS.—In October before cold weather, the crop may be raked by the common cranberry rake, or gathered by hand. Children can earn from 50 to 75 cents per day by picking them, at one cent per quart.

FALL PLANTING.—October and November are the best months for fall planting. Prepare the ground well in September and set the plants as above directed. Before winter sets in, protect by ploughing a furrow directly over the plants, and in garden culture by strewing dung or leaves, &c., over them. When well established, however, they need no covering whatever.

Miscellaneous.

Agricultural Societies.

To the Editor of THE CANADA FARMER:

SIR,—I was pleased to see the reply of "J. N.," of Springwood, in your 1st No., vol. II, in regard to your remarks in the "double number," headed "Township versus County Fairs," as I wished to see this subject fully discussed.

I agree with you, Sir, that we have too many petty Exhibitions, exhausting our time, creating too much expense in their management, and weakening our efforts for any practical or profitable results. "J. N." has given us some very strong arguments in favour of "Township Societies," which cannot be refuted; but he has suggested no remedy for the evils of which we complain. Township Fairs, certainly give an opportunity for all to exhibit with less trouble; but there is very little honour and satisfaction in obtaining prizes where there is little or no competition. It is true that the "spoils" are more thoroughly distributed; but the resources of the country are not properly developed by such feeble efforts.

I have watched the working of nearly all the Agricultural Societies in the county where I reside, and, but for one or two exceptions, should be prepared to vote for their discontinuance. Four or five, perhaps more, of the Township Fairs have made no progress the last ten years; some have retrograded; while one, at least, has made such progress as to be equal to the average of County Fairs in Canada West; surpassing, both in membership and influence, the County Show of the Riding in which it is situated. This convinces me that we cannot have an Agricultural Act, so constructed, as to meet every circumstance. The township I have referred to, takes no interest whatever in the County Society, being far from the county town, where the County Show is always held; hence, I presume, the principal cause of its success from the first, and its constant progress is induced by the special interest taken in agricultural improvement by the whole township,—a feeling peculiar to but few localities; and deserving careful culture.

I have thought of various plans to remedy the evil. First, would it be better to abolish the County Societies, and let the townships have all the "spoils" and thus render them more effective in their operations? Second, would it not be better to raise the standard of membership to one hundred, instead of

forty, as required by the Act, and thus weed out those that merely exist by force of circumstances, and for the sake of the "spoils"?

This last plan, Mr. Editor, would meet your wishes in respect to lessening the number; but would they prosper? That is the question!

It is evident that Agricultural Associations, as now constituted, are not popular generally. Scarcely one-fifth of the farming community support them;

February 8, 1865.

SIGMA.

NOSES.—The French and English have each nine proverbs relating to the nose. Here follows the nasal wisdom of the vernacular;

AGRICULTURAL ESSAYS.—On Saturday, the 18th instant, a series of lectures, or, to speak more correctly, a series of essays, by Mr. W. Weld, of Delaware, at the Mechanics' Institute, London, C. W.

"That the thanks of this meeting be given to Mr. Weld, for the very interesting and useful lecture with which he has favoured us; and that we hereby express our opinion that such lectures are eminently calculated to arouse the people of Canada to a more thorough development of the resources of the country."

TURF FOR FUEL.—Mr. Hodges, the contractor of the Victoria Bridge, possesses a large tract of land in the Township of Bulstrode, on which there is a large turf bog or Savane.

Markets.

Toronto Markets.

"CANADA FARMER" Office, Thursday, April 27, 1865.

The season, during the past two weeks, has been on the whole favourable, but cold, and the air somewhat frosty. There was, however, almost uninterrupted sun, and fine weather, interspersed with a few wet days and storm.

Flour steady. No 1 superfine at \$4 60 to \$4 75 per bbl. extra \$4 75 to \$5 00, superior extra, no receipts, fancy, nominal.

Barley dull and heavy, at 55c to 65c per bush. L. Oats at 45c to 46c per bushel, from teams and in store.

Provisions.—Butter.—Fresh, wholesale, per lb. 15c to 17c; retail, per lb. 16c to 18c, in tubs, wholesale, per lb. 15c to 16c.

Hams.—Wholesale, per lb. 9c to 10c, retail, per lb. 10 1/2c to 11 1/2c. Fitch Bacon.—Wholesale, per lb. 8c to 9c; retail, per lb. 11c.

Hamilton Markets, April 26.—Flour, firm, on account of the scarcity of wheat, at double extra, \$5 50, extra \$5 00; No. 1 superfine, \$4 50 to \$4 75.

London Markets, April 25, 1865.—Fall Wheat per bush. l. 90c to 95c Spring Wheat, do. 94c to 97c. Barley, do. 85c to 92c.

Paris Markets, April 26.—Spring Flour, per 100 lbs. \$2 25. Fall Flour, per 100 lbs. \$2 60. Spring Wheat, per bushel, \$7 1/2c.

Guelph Markets, April 25.—Fall Wheat, per bushel, 90c to 95c. Spring Wheat, do. 80c to 90c. Oats, do. 40c to \$4 3c.

Brantford Markets, April 21.—Spring Wheat, 85c. Fall Wheat, 90c to 95c. Flour, per cwt. \$2 25 to \$2 50.

Gait Market Prices, April 24.—Flour, per 100 lbs. \$2 00 to \$2 50. Fall W. A. per bushel, 88c to 93c.

Barrie Markets, April 25.—Fall Wheat, 85c to 90c. Spring Wheat, 90c to \$1. Oats, 55c to 60c. Peas, 50c to 55c.

Owen Sound Markets, April 20.—Fall Wheat, 75c to 80c. Spring Wheat, 70c to 75c. Oats, 50c to 55c.

Windsor Market, April 15.—Flour, No. 1, \$5 to \$5 60; Wheat, Fall, 90c to 95c, do. Spring, 80c to 85c.

Cobourg Markets, April 25.—Flour per Barrel, \$5. Fall Wheat, per bushel, 90c to \$1.

Brookville Markets, April 25.—Flour, superfine, per 100 lbs. \$2 25 to \$3. Oatmeal, do. \$3.

Ottawa Markets, April 26.—Flour.—Extra \$5 50 to \$5 75; No. 1, \$5 25 to \$5 50.

Montreal Markets, April 26.—Flour.—Receipts, 1,400 barrels; market very quiet and little business doing.

Detroit Markets, April 26.—Flour, quiet and dull. Nominal quotations are Superior \$7 75 to \$8 00, high extra \$7 50 to \$7 75.

Buffalo Markets, April 26.—Flour.—The market yesterday ruled quiet, but what transactions occurred were made at a good firm figure.

New York Markets, April 26.—Flour.—Receipts, 22,071 bbls. market dull and drooping, sales, 5,600 bbls.

Bull's Head, April 24.—With less than 3,000 head of beef cattle in market, we have another decline of full a cent a pound, and a remarkable dull market.

Advertisements.

COE'S SUPER-PHOSPHATE OF LIME,

MANUFACTURED BY

ANDREW COE, MONTREAL.

WARRANTED GENUINE.

Patented 3rd December, 1863.

Made of the best materials, and in the most improved manner, it is commended to the public as superior to any other in the market.

For Testimonials see back Nos. of this Paper.

Sold by James Fleming & Co., Toronto, O. W., and in all the principal towns throughout Canada.

THE CELEBRATED HORSE

"ANGLO SAXON,"

WILL leave his stable in Doljware, near London, on MAY the 1st, and will be in London on that day, at STRATFORD on the 3rd, GUELPH on the 5th, TORONTO, 8th, 9th and 10th, OSHKOSH, 12th and 13th, KINGSTON, 16th, 17th and 18th, BROCKVILLE, 20th and 22nd, PISSCOTT, 24th and 25th, MONTREAL, 27th, 29th and 30th.

TERMS OF SERVICE.—To ensure, if the Mare should have a horse colt, \$100; if a mare colt, nothing; \$ as a Single Service, \$25. Good mares may have the service on the horse by the owner.

Certificates of service furnished for pedigree. His stock has taken prizes wherever shown.

"ANGLO SAXON" is one of the purest stock-getters in the country, and considering the value of the horse, the cheapest Stallion travelling.

Grain's fee: 25 cents for showing the horse. Time of exhibiting the horse, 2 o'clock each day.

WANTED TO HIRE,—four of the best brood mares I can find to raise colts.

Names of Gentlemen that have engaged his services in the County of Middlesex for the season:—

- JNO SETHBERLAND, GEO ROBINSON, CHRISTOPHER WALKER, GEO. WALKER, COL. FITZGERALD.

May 1, 1866. W. WELD.

STRONG DELAWARE GRAPE VINES.

WARRANTED true, at 75c each, or \$6 per dozen. Other Grape Vines and all other Nursery Stock in abundance. Planting may be done with safety until the middle of May next.

Loxley P. O., near Toronto, May 1.

IMPROVED FARM FOR SALE.

IN the County of Simcoe, with CROP, STOCK, and IMPLEMENTS, the North 1/2 Lot No. 20, in the 10th Concession of North Simcoe, 100 acres, more or less; about 80 acres fenced and Fenced, of which 60 acres are about clear of stumps, and under crop with Wheat, Oats, Barley, Potatoes, and Hay, and the balance in Pasture.

Apply by letter, Post-paid, to PETER BEVERIDGE, On the Premises, Nottawasaga P. O.

Nottawasaga, April 16th, 1866.

v2-3-11

1865. 1865.

NOTICE.

THIS YEAR'S IMMIGRATION.

IMMIGRANTS of the classes so much needed in Canada, Domestic Servants, Mechanics, Farm Laborers, &c., are now beginning to arrive and may shortly be looked for in increasing numbers.

- MIAMILTON, - - R. H. RAE. TORONTO, - - - J. A. DONALDSON. KINGSTON, - - J. McPIERSON. OTTAWA, - - - W. J. WILLS. MONTREAL, - - J. H. DALEY. QUEBEC, - - - A. C. BUCHANAN, Chief Agent.

A record of such applications will be kept, and no pains spared by the various Officers of the Department to supply all wants.

GOVERNMENT IMMIGRATION OFFICE, Quebec, 1st April, 1865. A. C. BUCHANAN, Chief Agent, v2-1-61

STRAWBERRY PLANTS BY MAIL.

I WILL send THOMAS DE GAND STRAWBERRY PLANTS, in good order, Post-paid, to any part of the Province for 30 cents per dozen, or \$1 per hundred.

This is the best foreign variety, and has taken four first premiums in New York. [See "American Agriculturist" for July, 1862, 63, and 64.] Also, a complete treatise on Strawberry culture sent for 12 1/2 cents. Send P. O. Money Order if convenient.

Address, Post-paid, G. P. RIXFORD, Bedford, Missisquoi Co., C. E. v2-8-51

NOTICE.



FARMERS and others requiring FARM LABOURERS, MECHANICS, or FEMALE SERVANTS, are invited to Apply at

The Emigration Office—14 Front Street,

and those having FARM LANDS for sale, will please forward lists, with prices affixed

JOHN A. DONALDSON, Government Emigration Agent, Toronto, April 15th, 1865. v2-8-41

ROOT SEED SOWER,

AND

Manure and Plaster Distributor.

THE Subscriber has obtained a patent for the above Machine, which he desires to introduce to the notice of the Farming community. It will sow, and evenly distribute all kinds of root seeds, in any required proportions. It will at the same time distribute manure or plaster, in any required quantity.

It will sow and distribute the seed with or without any manure or plaster. It will distribute, without injury, plaster or ashes over plants when they come through the ground. It will sow double or single—two rows, or one at a time. It can be worked by manual labour, or by horse power. It is the most complete article of the kind, and one of the greatest LABOUR SAVING INVENTIONS yet brought under public notice.

Patent Rights for Counties and Townships for sale. Applications to be made to

JAMES CLAYTON, Farming Implement Manufacturer, &c. Whitby, April 15th, 1865. v2-3-61

GALLOWAY BULL.

THE Subscriber offers for sale, a Yearling Galloway Bull, bred from imported stock.

Port Hope, April 15th, 1865. WILLIAM RODDICK, v2-8-21

LANDS FOR SALE.

TWENTY THOUSAND ACRES OF LAND, both wild and improved, and at low prices, for sale in various townships through out Upper Canada, cheap and on easy terms.

For lists and particulars, apply to the proprietor, T. D. LEDYARD, Barrister, &c., South-west cor. of King and Yonge-sts., Toronto. Toronto, March 16, 1864. v2-8-11

FLOWER SEEDS!!

ALL the newest and best varieties 20 packets, postage free, for One Dollar. Send for a Catalogue.

v2-7-31

VEGETABLE SEEDS.

THE best, and most useful varieties, just imported 20 packets, postage free, for One Dollar. Send for a Catalogue.

v2-7-31

GROUND BONE MANURE.

REDUCTION IN PRICES.

FINE BONE DUST, 60 CENTS PER BUSHEL; Half-inch Ground Bone, 50 cents per bushel.

On all orders over \$25, a discount of 10 per cent. will be allowed.

PETER R. LAMB & CO. P.S.—Delivered at the Railway Station free of charge.

March 1, 1865. v2-5-81

SOMETHING NEW UNDER THE SUN!

ALSO IN CANADA.

IMPORTANT TO CHEESE MAKERS. The undersigned is prepared to fill any amount of orders for CHEESE BOXES and SETTERS, at a very low rate. All orders will be carefully attended to.

Ingersoll, March 24, 1864. v2-7-61

ONE DOLLAR PER ACRE.

The Canadian Land and Emigration Company (CAPITAL £250,000 STERLING.)

ARE at present selling at the above price their excellent Lands in the rapidly-improving settlement in the

TOWNSHIP OF DYSART, CO. PETERBOROUGH.

For information, apply to the Secretary, C. J. BLOWFIELD, Esq., Toronto;

or to C. R. STEWART, Esq., P.O. Halliburton, Co., Peterborough. v2-6-61

PRUSSIAN BLUE, EARLY KENT,

AND

MARROWFAT PEASE

WANTED.

ANY parties having PRUSSIAN BLUE, EARLY KENT, or MARROWFAT PEASE for sale, delivered at the nearest railway station or shipping port, by sending samples by parcel post, prepaid, and communicating with the undersigned, will find a purchaser.

GEORGE LAIDLAW, Box 398, Toronto. v2-3-61

RED CEDAR POSTS WANTED.

ANY parties having RED CEDAR POSTS eight feet long, and three inches through at the small end, will find a purchaser by communicating with

GEORGE LAIDLAW, Box 398, Toronto. v2-3-61

THE CANADA FARMER is printed and published on the 1st and 15th of each month, by GEORGE BROWN, Proprietor, at his Office, No. 26 and 28 King Street East, Toronto, U. C. where all communications for the paper must be addressed.

Subscription Price \$1 per annum, (POSTAGE FREE,) payable in advance. Bound volumes for 1864 may be had for \$1.30. Subscribers may either begin with No. 1, receiving the back Nos. for 1864, or with the first No. for 1865. No subscriptions received for less than a year, and all commence with the first number for the respective years.

CLIPS will be furnished at the following rates:— TEN COPIES for... NINE DOLLARS. TWENTY COPIES for... SIXTEEN DOLLARS. FORTY COPIES for... THIRTY DOLLARS. ONE HUNDRED COPIES for... SEVENTY DOLLARS.

To Agricultural Societies ordering more than 125 copies, the FARMER will be sent at SIXTY CENTS.

THE CANADA FARMER presents a first-class medium for Agricultural advertisements. Terms of advertising, 20 cents per line of space occupied—one inch space being equal to 12 lines. No advertisement charged less than \$2, being ten lines of space.

Communications on Agricultural subjects are invited, addressed to "The Editor of the Canada Farmer," and all orders for the paper are to be sent to GEORGE BROWN, Proprietor and Publisher.