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THE BRITISH AMERICAN



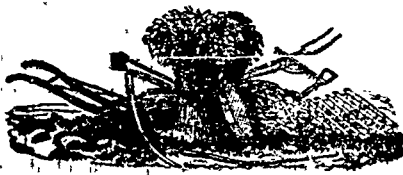
CULTIVATOR.

"AGRICULTURE NOT ONLY GIVES RICHES TO A NATION, BUT THE ONLY RICHES SHE CAN CALL HER OWN."—Dr. Johnson.

VOL. 2.

TORONTO, OCTOBER, 1843.

NO. 10.



THE CULTIVATOR.

* Agriculture is the great art which every government ought to protect, every proprietor of lands to practice, and every inquirer into nature improve.—Dr. Johnson.

TORONTO, OCTOBER, 1843.

Loyal Agricultural Clubs—District Boards of Agriculture—A Provincial Board of Agriculture—A Journal of Canadian Agriculture—and Provincial Shows.

The friends of Canadian Agricultural improvement, who have carefully read *The British American Cultivator*, during the past two years, will not be taken by surprise, when we announce to them that a most unprecedented and important agricultural movement is at hand, in Canada. The leading features of this movement is indicated at the head of this article, and we confidently give it as our opinion, that more will be accomplished for Canadian Agriculture in the course of a twelve month, than has been brought about for the past ten years. It would occupy a number of pages to give a full and lucid outline of the several grades of associations, which we intend, if we be spared, shall be organized and brought into vigorous and useful exercise, within a very short space of time. The first steps necessary to be taken to consummate the scheme, are the

formation of an Agricultural Club in each township,—the officers and members of which should meet once per month, to discuss agricultural topics, report experiments, and elicit such other practical information, as the intelligence and patriotism of the parties assembled can advance. The substance of these proceedings to be prepared by the Secretary of the club, and submitted through its representative to the District Board of Agriculture.

The District Board would be composed of a talented and practical representative from each Township Club, who should meet once in three months to prepare the information for publication that might be collected by the Township Clubs, and to take the lead in managing agricultural shows, and such other matters as come directly under the control of the present District Agricultural Associations.

A Provincial Board would be composed of a certain number of representatives from each District Board, whose duties would be of a higher order than the District Boards, inasmuch as they would have the management of the Provincial Journal of Agriculture, and the supervision of the funds expended in the Provincial Agricultural Show, which would be held each and every year, in agreement with the manner and form pointed out in their constitution.

In forming Clubs and District Boards of Agriculture, many difficulties will, no doubt, present themselves to the view of the parties who engage in their formation. These difficulties may easily be surmounted, if the agri-

culturalists themselves would only unite for their mutual and general benefit. We have every reason to believe that they will thus unite, and by this union and sound policy that the profession of Canadian agriculture will be placed on the exalted footing that it so highly merits.

Further information on these topics will be given through our next number, which will be before the public by the 20th of November.

Owing to a press of business, altogether unconnected with the management of our journal, and the short period in which this number has been printed, we have not that variety of original information in the October number, that we intended to have prepared. The selections will, we trust, be both interesting and useful, and at the same time calculated to inspire the minds of the youth with proper sentiments, and a due regard to the importance of cherishing a desire to make themselves thoroughly acquainted with the science and practice of agriculture. There are many articles in this number that we would particularly recommend to the favourable notice of the juvenile readers of this journal. Heads of families are highly culpable for being indifferent in regard to the parental duties, which they too often neglect to perform,—in our humble opinion, one of the most important of these duties is the formation of a valuable family library. Such of our readers who have means and a desire, would perform a most commendable act by taxing themselves one, two, or three pounds a-year, in furnishing their rising families with a useful variety of reading.

THE CANADIAN TARIFF.

In our last impression, under this head, we expressed our opinion freely on the importance of a change being effected in our fiscal regulations. The views we advanced on this point, were an honest expression of opinion entertained by us, and from which we shall not retract, unless better arguments are adduced by the advocates of free trade than those which have characterized the mass of impracticable theories that have been written on that side of the subject.

If it were possible, through any act of ours, to effect a change in the present tariff laws of this country, we would unquestionably give the Canadian farmer and mechanic every justice that the importance of their stations, and the merits of their calling warrant, but we possess no such influence, nor do these classes themselves possess that amount of influence in the Colonial Legislature which would embolden their medium of communication to express itself with that degree of assurance that it otherwise would if those interests were properly represented.

From what was advanced in our last, the readers of this journal will clearly see that, as soon as the circumstances of the country will admit, a high tariff will be recommended by us, not so much with a view to retaliate as for the general advancement of agricultural and commercial prosperity. We apprehend that this intricate question will be better understood when public attention has been more devotedly drawn to its importance.

We have before us a table exhibiting the proposed duties on agricultural products, which will, no doubt, pass both branches of the Legislature, without any material alteration. This table of duties, when compared with the duties on manufactured goods, may be considered fair protection, and will, no doubt, give general satisfaction to all classes; but when we compare it with the American tariff, it comes far short of what we would call "fair play." Hops, butter, cheese, hemp, and flax should be subject to the same scale of duties that is collected on those articles going into the United States. If 9 cents per lb. were exacted on all American cheese entering the Canadian markets, the result would be that the Canadian farmers would turn their attention largely to the dairy business. A farmer who sells only a few hundred lbs. of cheese in each year, must have a profit of 20 or 25 per cent. on the money and time invested in the manufacture of the article, or else he would consider that the business were a losing one. But, supposing that fifty or a hundred cows were kept by the farmer, and a reasonable share of attention and skill were devoted to the business, a profit of eight or ten per cent., in this case, would be better than heavy profits on a small business. The more a man sells the cheaper he can sell. Under this low proposed tariff, the Americans will still flood this country with cheese, and supply, as formerly, nine-tenths of the market. The American dairy husbandmen have had long experience in the business

and have spared no pains or expense in introducing the most scientific and economical methods of managing their business. Not so with the Canadians; they have allowed themselves to be undersold in their own markets by a people who have less natural advantages than they possess, when at the same time the Canadian farmers might have been enabled to sell at lower prices than their neighbours, if they had introduced the same skill, and invested a proportionate amount of capital in this department of business.

A farmer in the Brock District, who keeps thirty cows, informed us some time since, that eight dollars per 100 lbs. for cheese, paid him much heavier profits than the business of growing wheat at a dollar per bushel. It is useless for us to recommend the Canadian farmers to turn their attention to the dairy business, so long as their markets are thrown open to a foreign article; but let a high duty be exacted on all foreign cheese entering the Canadian market, and we venture to predict that in less than two years they will be supplied with an article of as good description, and afforded at as low a price, as has been done from a foreign country. Under such a tariff as we propose, British and American cheese busbandmen would settle in this country, which would introduce the business on a large and profitable scale, and, instead of Canada being an importer of the article, she would export it largely to Britain, where it would be admitted at mere nominal duty. We already know of three American farmers who have purchased land in this country, and have migrated here for the express purpose of engaging largely in the manufacturing of cheese. Each of these farmer have between thirty and forty cows, and find it a profitable business at the present low prices.

We mentioned in our last that it would be difficult, in a few years, to compete with the agriculturalists of the "far west." As another evidence of the soundness of the opinions we entertain on this subject, we make the following quotation from the *Prairie Farmer* for October, in which the Editor remarks, in alluding to an article on the low price of produce in the Eastern markets, in a late number of the *Albany Cultivator*, that "butter and eggs have been selling every season at the west, for less than six cents per lb. for the former, and six cents per dozen for the latter. The East must make up its mind to Western competition, and the extent of it is no where nearly realised as yet, either in the East or West. The elements of production are by no means yet put in full operation here. The West has been occupied hitherto, and will be for some years, in getting its harness on; and it is fairly staggering to contemplate the results, when its full strength is put to advantage."

It is clear to us that English farmers will never allow the question to rest, so long as the United States produce is admitted into the British markets, through the Canadian waters, at a mere nominal duty. It is unreasonable for us to expect it, and, in our opinion, the

statesman who would coolly calculate on the advantages which the Colony would derive from this great boon, without taking into the account the great loss that the English farmer must sustain, and the indirect loss which the Colony must suffer in being merely the carrier of the produce of a foreign country, certainly deserves to be censured for being void of patriotism.

We wish to be distinctly understood that we are strenuous advocates of a protective tariff on all articles, whether agricultural or mechanical, and also advocate a free trade with our parent country, so much so as if we were part and parcel of the British Isles. As soon as this can be effected, hundreds of thousands of the wealthy and respectable portion of British subjects will select this country as a home for themselves and their families; and, as we remarked in our last, British America might be placed, by such an arrangement, in an enviable position, when compared to the neighbouring country.

Canada would shortly become a large and profitable exporting country to England, if it were possible to raise the spirits of her hardy and worthy sons. It is clear that they have been much neglected by the men of theory, and cold-hearted speculators, whom they have selected to legislate for them from Parliament to Parliament, since the first settlement of the country. Merit has not been rewarded to any extent. Arts and sciences have been, in a great measure allowed to struggle on without much aid; and mechanical genius, and agricultural skill have not received that fostering care which is necessary in a new country to ensure rapid progress. The day has gone by for a repetition of these evils. A class of true lovers of their country—their institutions and laws, in our opinion, will come into notice.—these men will see the necessity of burying into oblivion every thing which is calculated to arouse the angry passions of man, and study to legislate for the good of the country. It is not a legitimate province of ours to enter into the details of the past chequered history of Canada, but so far as we are concerned, we are determined to expose the fallacy of parties exhibiting such a deadly spite towards each other, when there is not the slightest grounds for such an exhibition.

What we want to see consummated in this highly privileged country, is that encouragement should be given to the introduction of the cultivation of new articles for export and protection against all articles imported in the country from the United States.

Labour in Eastern Canada is forty per cent. less than in the Eastern States; and, notwithstanding, thousands of pounds worth of manufactured articles are brought into Canada from that country. We are happy to see by the Montreal papers, that a few enterprising men have made arrangements to work a large manufacturing establishment in the District of Montreal. We wish them success, and hope others will follow so worthy an example. If

skill and capital, and a reasonable protection could be embarked in domestic manufactures, every article that can be profitably manufactured in the United States, which we require to purchase from that country, might be profitably worked here.

In a private letter to us from the enterprising proprietors of the *Port Neuf* paper manufactories, these gentlemen mention that during the last few years, the amount of paper that has been manufactured at their establishment has equalled 40,000 dollars worth, per year,—and that they afforded their article at prices considerably lower than the American manufacturer could afford to supply their article for this market.

It is needless, at present, to dwell on this subject, nor is it necessary for us to adduce further arguments in favour of a protective tariff, as the practical workings of the system are in full and vigorous operation in a neighbouring country, whose climate, soil, and other circumstances are very similar to our own.

From the (Maine) Farmer and Advocate.

PRAISES OF RURAL LIFE.

A PASTORAL—BY A COUNTRY LASSIE.

Though city ladies treat with scorn
The humble farmer's wife,
And call his daughters rude and coarse,
I'll live a country life.

I'd rather spin, and weave, and knit,
And wholesome meals prepare,
Than, thronged with servants, drest in silk,
Lounge in my easy chair.

I love to see my chickens grow,
My turkeys, ducks, and geese;
I love to tend my flowering plants,
And make the golden cheese.

I love to wash, I love to sew,
I love to bake and brew;
I love to keep my kitchen neat,
And humble parlor too.

And when the grateful task is done,
And pleasure claims a share,
With some dear friend, I'll walk abroad,
And take the balmy air.

Not through the dusty, crowded streets,
Amid the bustling throng,
But in some pleasant, cool retreat,
We'll hear the woodland song.

Or trace the winding silver stream,
And linger on its banks,
While all the birds, in concert sweet,
Present their evening thanks.

We'll seek the ancient forest shade,
And see its branches wave,
Which have, perchance, a requiem sang
O'er many a red man's grave.

We'll breathe the pure, untainted air,
Fresh from the verdant hills,
And pluck the violet from its bed
Beside the laughing rills.

I love the country in the spring,
When all is life and glee—
When songs of joy, from every grove,
Are wafted on each breeze.

The smiling pastures, robed in green,
How beautiful and gay,
With bleating flocks, and lowing herds,
And little lambs at play.

I love m' 'st rural scenes to dwell,
In summer's pleasant hours,
And pluck her sweet, delicious fruits,
And smell her fragrant flowers.

I love to see the growing corn,
And fields of waving grain—
I love the sunshine, and the shade,
And gentle showers of rain.

I love to see the glittering dew,
Like pendant diamonds, hung
On ev'ry plant, and flower, and tree,
Their glossy leaves among.

I love the joyful harvest months,
When stores are gathered in;
I love to see the golden corn,
And bending sheaves of grain.

I love to see the cellar filled
With sauce, of various kinds—
Potatoes, beets, and onions too,
And squashes from the vines.

I love to see my father pluck
The apples from the trees—
They'll give us many a pleasant treat
And yield us sauce and pies.

I love to see the well-filled barn,
And smell the fragrant hay—
I'll milk white mother teeds the lambs,
And see them skip and play.

I love to rise before the sun,
And see his rosy beams,
Glimmering through the waving trees,
In quivering, fitful gleams.

I love, where nothing intervenes,
The setting sun to see,
Tinging the clouds with every hue
That charms the gazing eye.

I love the country ev'rywhere;
Here let me spend my life;
No higher shall my thoughts aspire—
I'll be a farmer's wife.

SARAH.

COMPARATIVE VALUE OF HAY, VEGETABLES AND CORN.

I wish to draw briefly the attention of Farmers to the value of hay, compared with other crops, for the feeding of stock. An acre of hay yields one ton and a half of vegetable food. An acre of carrots, or Swedish turnips, will yield from ten to twenty tons; say fifteen tons, which is by no means an exaggerated estimate. It has been ascertained by experiment, that three working horses, fifteen-and-a-half hands high, consumed at the rate of two hundred and twenty-four pounds of hay per week, or five tons one thousand and forty-eight pounds of hay per year, besides twelve gallons of oats per week, or seventy-eight bushels by the year. An unworked horse consumed at the rate of four and one quarter tons of hay in the year. The produce, therefore, of nearly six acres of land is necessary to support a working horse by the year; but half an acre of carrots, at six hundred bushels to the acre, with the addition of chopped straw, while the season for their use lasts, will do it as well, if not better. These things do not admit of doubt. They have been subjects of exact trial. It is believed that the value of a bushel of Indian corn in straw and meal, will keep a healthy horse in good condition for a week. An acre of Indian corn which yields sixty bushels, will be ample for the support of a horse through the year. Let the farmer, then, consider whether it be better to maintain his horse upon the produce of half an acre of carrots, which can be cultivated at an expense not greatly exceeding the expense of half an acre of pota-

atoes, or upon half an acre of ruta baga, which can be raised at a less expense than potatoes, or upon the grain produce of an acre of Indian corn, or on the other hand upon the produce of six acres of his best land in hay and grain; for six acres will hardly do more than to yield nearly six tons of hay and seventy-eight bushels of oats. The same economy might be as successfully introduced into the feeding of our neat cattle and sheep.

These facts deserve the particular attention of the Farmers who are desirous of improving their pecuniary condition. It is obvious how much would be gained by the cultivation which is here suggested; how much more stock would be raised; how much the dairy produce might be increased; and how much the means of enriching the land and improving the cultivation would be constantly extending and accumulating. But when we find on a farm of two hundred acres, that the Farmer cultivates only two acres of potatoes, one acre of ruta baga, and perhaps a quarter of an acre of carrots, we call this "getting along," in the common phrase; but we can hardly dignify it with the name of Farming. I am aware that labour of a proper kind is in many cases difficult to be procured, and with our habits, as difficult to be managed, Farming, likewise, can in few situations be successfully managed, unless the Farmer has capital to employ, equal at least to one year's manure and one year's crops. A large portion of our Farmers, also, from the nature of their habits and style of living, are so prosperous and independent, that they have no occasion to extend their cultivation beyond what it now is, in order to meet their wants; and to incur all the trouble, vexation and risk of employing more labour, expending more capital, and increasing their cares.—*Colman's Agricultural Survey.*

MILK.

Having recently seen a litter of fine pigs of four months old, that have increased in weight a pound a day, each, since their birth, and had been fed exclusively on milk, I was induced to look into the composition of an article which is thus capable of supporting animal life, without any other food, and of building up such carcasses, composed of bones, meat, fat, skin, bristles, hoofs, &c.

Chemists say that cows' milk is composed of the following articles, viz:

Cheese,.....	648	per cent.
Butter,.....	3.13	"
Sugar of milk,.....	4.77	"
Salts and mucus,.....	0.60	"
Water,.....	87.02	"
	100.00	

And the above articles, when analyzed, are found to be composed of carbon, oxygen, hydrogen, nitrogen, and various saline and earthy substances.

A French chemist states, in treating on the phenomena presented from microscopic observation, in the transformation of cream into butter, that the cream consists of the globules of the milk, which rise to the surface from their lightness, and which contain the butter in the form of pulp, enveloped in a white, thin and elastic pellicle. The action of the churn, he says, produces nothing more than the rupture of the pellicle, and it is the fragments of this pellicle which whiten the liquid called butter-milk.

When cows are fresh and fed with nutritious food, the quantity of butter contained in these pellicles, is greater, and the covering is thinner, and consequently less agitation in the churn breaks them, and the butter comes much sweeter than it does when they are fed sparingly on articles containing but little nutriment.

The sugar of milk is obtained by evaporating the whey to the consistence of honey, and extracting the fine matter remaining dissolved in the whey, after the curd is formed.

—*Farmers' Cabinet.*

We are indebted to the politeness of Captain ELMES STEELE, M. P. P., for the following communication on the prices given for hemp and flax at the Provincial Penitentiary, Kingston:—

PROVINCIAL PENITENTIARY,
16th October, 1843.

SIR,—I have the honour to acknowledge the receipt of your letter of this date, and I beg to inform you, in compliance with your request, that the following are the quantities of Hemp and Manilla purchased by me, and manufactured for the benefit of this institution, during the years stated against each:—

1839—1 ton clean Russia Hemp,	\$245 per ton.
cut gr. lb.	
19 1 16 Manilla,	- - - 150 "
ton cut. lbs.	
1 1 0 23 Sisal,	- - - 140 "
6777 lbs. Manilla,	- - - 147 1/2 "
2164 lbs. Prussian,	- - - 225 "
735 lbs. do. dressed	cts. 12 1/2 per lb.
783 lbs. Cordilla,	- - - \$115 per ton.
2424 lbs. Sun,	- - - 127 1/2 "
2338 lbs. Cordilla Flax	cts. 8 1/2 per lb.
2255 lbs. Kentucky,	- - - \$150 per ton
613 lbs. Jute,	- - - 85 "
1 ton Riga,	- - - 230 "
cut gr. lb.	
1840—19 1 20 Manilla,	- - - 142 1/2 "
8616 lbs. do.	- - - 140 "
1276 lbs. do. dressed,	cts. 12 1/2 per lb.
1368 lbs. Bombay,	- - - \$130 per ton.
cut. lbs.	
8 0 12 Sun,	- - - 115 "
3 tons Codilla,	- - - 72 1/2 "
2 1/2 cwt. clean Russia,	- - - 180 "
cut gr. lb.	
3 1 0 13 Kentucky,	- - - 130 "
1843—0 19 2 15 Amer. dressed	150 "
2727 lbs. do. water rotted,	150 "
cut gr. lb.	
1 0 1 8 Russia, clean,	200 "
4647 lbs. Manilla,	- - - 145 "

The only quantity of Canada Hemp offered for sale here, was a small parcel of 114 1/2 lbs., in 1840, for which I gave 6d. per lb., with a view to encourage future supplies, as it was in an extremely clean state, and fit for immediate use, without further labour. In purchases of hemp, of this latter description, every thing would depend on the state in which it was brought here, as well as the market rates, at which hemp could be purchased elsewhere.

I have the honour to be, Sir,

Your most obed't servant,

H. SMITH, Warden.

E. STEELE, Esq., M. P. P., &c.

We feel satisfied that the Canadian farmers will not fail in embracing the opportunity here presented, in furnishing an article of their own growth, which may be profitably done at much lower prices than those annexed to the different descriptions of fibres mentioned in the foregoing table.

In conversation with subscribers to *The Cultivator*, we are happy to notice that numbers intend to enter largely into the business of growing both these plants—some to the extent of ten acres.

The English market is open to us, if we have any good sense to avail ourselves of it. *The Farmer's Herald*, for September, in recommending the English farmers to enter extensively into the cultivation of flax makes use of the following words.—“The circumstance of our being at this time importers of flax to the extent of 80,000 tons; and of seed, to that of 3,200,000 bushels and upwards

(besides oil cake), has awakened us to a due sense of our situation, and shown us really how much money is annually lost to us as farmers in the omission of the flax crop from our course of tillage.

As soon as associations for the promotion of agricultural improvement can be formed on correct principles, so soon will the cultivation of hemp and flax be considered a matter of great importance to agriculture.

We expect that some hundreds of acres will be sown in the Home District the ensuing summer, through the agency of the Home District Board of Agriculture.

THE CENTRAL NEW YORK FARMER AND OURSELVES.

The Central New York Farmer, published at the flourishing village of Rome, is one of the best practical works on agriculture now extant. It has a corps of editors, consisting of three of the most talented practical farmers that the empire state can produce. We always welcome this journal with a degree of delight and satisfaction rarely produced by any other work of a similar character, because we feel confident, that from its well stored columns of useful matter, we shall at all times be enabled to glean something new and useful. One of the editors, sometime since, had occasion to make allusion to our remarks on the Home District Ploughing Match, in which he invited us to purchase one of the light and useful ploughs, which are of modern invention in his neighbourhood, which he felt confident, would prove a great acquisition to the heavy ploughs in use in Canada. We are aware that there are certain implements of husbandry in use in the neighbouring states, that might be profitably imported here for patterns, but we at the same time feel confident, that the farmers of the United States, are twenty years behind the farmers of the Home District, in their ploughing operations and implements; and if the Editors of the *Central New York Farmer* feels at all anxious about the matter, we would be happy to direct his attention to a plough that is manufactured in Toronto, that would prove of an incalculable advantage to the enterprising farmers of his neighbourhood. While we recommend the Editors of the *Farmer* to encourage the introduction of better ploughs, in their spheres of usefulness, we would, at the same time, wish our friends, who take the management of Canadian Agricultural Societies to take proper steps to encourage a better system of ploughing, by importing better implements, and also importing and encouraging proficient mechanics, who may construct these implements in their several neighbourhoods.

AN IMPORTANT INVENTION.

Mr. Hiram Bigelow, of the township of Tecumseth, has lately invented a machine for drying wheat, which is considered by competent judges to be a most important invention. Mr Bigelow has secured a patent for Canada, East and West, and intends to purchase an exclusive right for their sale in the United

States. This will cost one hundred pounds in all, which shows conclusively, that the inventor is most sanguine that his machine will be brought into successful and general use. It is confidently asserted, that spring wheat may be passed through this apparatus, and prepared in the shortest notice for packing in barrels, which may be sent to the English market in as perfect condition as flour from winter wheat. It will prepare one thousand bushels in a day, of twelve hours. The price of Mr. B's. machine will be £50, delivered in any part of the province. If it will perform in a perfect manner, all that its inventor warrants, each, extensive miller in the province will be benefitted, to a large extent, by their use. Any communication on this subject, addressed to Hiram Bigelow, Bond Head P. O., Home District, will receive due attention.

LARGE YIELD OF WHEAT.

The *Tennessee Agriculturist* says that HILL CARTER, Esq. on James River, Virginia, from 160 acres of land cut 5,280 bushels of wheat; and the same paper states that a gentleman in New York had 52 bushels of wheat to the acre, on a clover field that had been turned over, and the wheat sowed on the inverted sod and harrowed in. The editor further remarks that when the sod is turned over and allowed to remain undisturbed, the ground will remain moist and loose, till all the vegetable matter is exhausted; but, as is too often the case, if the sod be broken to pieces, and exposed to the sun, much that is calculated to benefit the wheat, will be evaporated and lost, and the land will be more apt to run together by heavy rains.

We agree with the *Agriculturist*, that this is a good plan, and one which we have more than once highly recommended. It is practiced in England and Belgium with a wonderful success, indeed, naked summer fallows are but seldom made. The press or roller would do of great service to the young wheat plant grown on inverted clover sod.

CALEDONIA SPRINGS.

Too much cannot be said in favour of the medicinal properties of the *Caledonia waters*, and as they are not so highly valued by a large portion of the Canadian population as they should be, and in many sections of the country they are even unknown,—we feel a pleasure in copying the following extract from a correspondent of the *Rochester Monroe Democrat*, of the 10th of October, 1843:—

“I arrived here about a week since, and have been so much delighted with the place, as to be unable, as yet, to tear myself away from it. Its retired situation, its neat, substantial buildings, the cleanly appearance of its streets, the beauty of the surrounding scenery but especially the superior efficacy of its waters in the cure of chronic diseases, rheumatism, liver complaints, dyspepsia, and other ailments that flesh is heir to”—all conspire to render it a place peculiarly attractive to the man, a pleasure as well as to the invalid.

William Parker, Esq., the proprietor of the Springs, is a gentleman of much public spirit

and is doing all in his power to add to the attractions of the place. He also owns most of the other property here. The principal hotel, the "Canada House," is owned and kept by him. This is a splendid edifice, and is capable of accommodating very comfortably upwards of one hundred visitors. There are two other hotels and several boarding houses here; but still there are not the necessary accommodations for visitors. In order measurably to remedy this inconvenience, Mr Parker is about making extensive additions to his hotel; and unless the rush next season should greatly exceed the most reasonable calculations, there will be rather more elbow room here than there has been the present season.

Those now frequenting the springs are principally residents of the province, although among the late arrivals, I notice the names of gentlemen from New Orleans, the West Indies, and several travellers from Europe. If the American people fully understood the medical qualities of these waters, I am persuaded that hundreds of them would flock hither annually. The waters of Saratoga and Avon are known to be excellent in the cure of many diseases; but those of Caledonia I believe to be quite as good, if not better, as the analysis of them by Dr. Chillon, of New York, most conclusively proves. These waters have been sold to a considerable extent in the city of New York; and during the present season, orders for them have been received from England, Scotland, and the West Indies.

Game in the neighbourhood is very abundant. I went out a few hours, yesterday afternoon, and returned with my bag well filled. This favourite sport to many pleasure seekers, added to the various other amusements to be found here, (to say nothing of the courtesy extended to all strangers by the proprietor, nor of these really valuable waters), cannot fail of making the Caledonia Springs a decided favourite with all those who have once visited them."

HOOF ROT.

Mr. Johnathan Sissons, of the township of Vespra, made an experiment last spring on an animal which was suffering severely with this disease, which effected a cure: he extracted the whole of the diseased part of the hoof, and applied a strong solution of blue vitriol. This disease is supposed to be caused from frost, and if the above remedy were applied, as soon as noticed, it would, no doubt, be a means of saving the lives of thousands of herd of horned cattle.

MANURES.

From the Transactions of the Society for promoting Agriculture in the State of Connecticut.

OF MIXED EARTHS AND CREEK MUD.

What experiments have been made of creek or harbor mud from the sea flats? what of mud taken from fresh water ponds? what of the soil taken from swamps overflowed? how have they been used? on what soils, for what crops, for what grasses, and in what manner, in what quantities, and what advantage has been derived from them?

Mr. Belden, of Wethersfield. A piece of land in my neighbourhood was manured with earth that had been leached to make saltpetre—the earth had been leached ten years before—the land has borne surprising crops ever since this earth has been applied. I have never witnessed so great and lasting effects from any species of manure.

Mr. Hart, of Berlin. One of my neighbours carried on to his up-land moving a number of loads of earth from under an old

barn. It has improved his land surprisingly. For several years the crops have been very great.

Mr. Abel Bronson, of Waterbury. I have tried the earth taken from the ditches in my meadows, but never found that my land received any benefit. I have carried large quantities into my long stye and barn-yard in autumn, and in the spring have manured my Indian corn with it. I have found a load of this mixture of the earth and manure beneficial as a load of unmixed manure, from the barn-yard, or the stye. I have used the mixture, when it has lain in this situation a year, and never found any dung better.

OF YARD OR STABLE DUNG—TANNER'S BARK, &c.

What methods have been taken to augment the manures taken from the yard or stable? What means have been found to succeed best for that purpose?

Mr. Andrein Hull, Jr., of Cheshire. I have found no manure so beneficial, on poor land, for potatoes, as the droppings of the cattle, intermixed with straw, thrown into the yard to make manure, even before it is matured.

Mr. Abel Bronson, of Waterbury. I have thrown pumice, tanner's bark, &c. into my hog stye, and found them to become very good manure.

Mr. Blakesley, of Plymouth. More than twenty years past, I had a large nursery of fruit trees. To prevent weeds, &c. from growing, I covered the ground over with tanner's bark. It prevented every thing but the trees from growing. After some years had elapsed, when the trees had been all taken from the nursery, I sowed the land with oats and clover. The oats were good, and the clover excellent. Since the clover has gone out, the natural grass has come in, and the land has continued as good as any I have. I have found bark one of the best kinds of manure.

I find, from experiment, that two loads of dung carried on the land in spring, is worth three loads carried on in the fall.

PLOUGHING IN OF CLOVER, OR BUCKWHEAT.

Have any experiments been made of manuring land with clover, buckwheat, or oats, turned or ploughed into the earth before they were ripe; and has any benefit been received?

Mr. Hart, of Berlin. I have made an experiment in ploughing up a field on which I had two years before sown clover. The clover was mowed and yielded a good crop. Soon afterwards I ploughed the field, and let it lie until I found that the clover had been matured. I then ploughed it again. The land looked very well, and I supposed it much enriched. I sowed wheat, but was disappointed in it, for the crop was poor. I knew, however, that the land was much enriched, and concluded that I was prevented from having a good crop of wheat from other causes than the land not being well prepared.

Mr. Philips, of Samsbury. I ploughed up a clover field, the second year after it was sown, when the roots were full grown. It was about a fortnight after mowing the land. I let the field lie in this situation about six weeks, then harrowed it well—sowed it with wheat, and ploughed in the wheat. The next year I harvested as much as twenty bushels to the acre. The soil was rather dry and sandy.

Mr. Hooker, of Farmington. I sowed a sandy field with buckwheat. When it was grown and in bloom, I ploughed my field in ridges, and covered the wheat. After it had lain about six weeks, I ploughed it again in ridges, putting the new ridges where the stalks were before. Soon afterwards I harrowed the field, and sowed it with wheat. The next summer I harvested an excellent crop.

Mr. Belden, of Wethersfield. I have sown buckwheat, both on sandy land and on loamy land, and ploughed it in to prepare the land for wheat. I have had good crops from it, and have found the experiment to succeed to my wishes.

ACCUMULATION OF MANURES.

There are some points connected with the theory of turning in green crops for manure, upon which it may not be improper to dwell, especially as the rationale of the system appears to be somewhat obscure, and involved in the intricacy of principles which many of our farmers do not appear to understand.

That the mere turning in of a crop should actually enrich the soil upon which it has grown, is what many find no reason to believe. There is a difficulty, with many, in supposing that plants can grow and be matured without exhaustion of the soil, which is regarded, by many, as the principal and sole medium through which plants derive their nutriment, and to which, consequently, the plants so grown and nourished, can return no more *palulum* than they receive. The physiologist, however, assumes a different position in relation to this important point. He recognizes the vegetable kingdom as divided, naturally, into three grand and distinct orders or classes of plants, and characterizes them, according to their different modes or habits of growth, by the three distinctive appellations of *terrestrial*, *aquatic*, and *aerial*;—the first comprising that extensive order, the individuals of which are native to dry and arable lands, and which derive the most important portion of their pasturage from the soil; the second embraces all plants to which the classical name *aquatic* may be justly regarded as belonging, whether they be in their nature strictly marine or sub-marine;—the third division contains only such as are known to derive a large portion of their subsistence, or the whole of it, from the air, and which are not, or at least appear not to be sensibly influenced by the nature or character of the soil to which they are confined.

To illustrate each of these orders by a distinct reference to individual plants would occupy more room than we have at present to devote. It will be necessary however, to say, that in selecting crops to be turned in, those ought invariably to be preferred which derive their sustenance principally from the air. A slight knowledge of vegetable physiology will be amply sufficient to direct us aright in this matter, and to unfold to us the complicated system of laws by which the all important and wonderful economy of vegetable nutrition is so admirably governed and controlled.

"Nature is a skillful workman," and orders every thing so as best to subserve the great and important purpose for which it was formed—the welfare and happiness of man.

Of the many crops usually produced by our farmers, for this purpose, buckwheat, peas and clover, are probably in best repute. It may here be remarked, that all plants of a culmiferous character, or which are distinguished by having a profusion of large and expansive leaves, are those which derive the largest portion of nutriment from the air; those plants having small leaves being gross feeders, and consequently powerful exhausters of the soil. —Correspondent of Boston Cultivator.

SUBSOILING—SUBSOIL PLOUGHS.

BY C. N. DEMENT, ALBANY.

From the Transactions of the N. Y. State Agr. Society.

Hitherto the farmers of this country have cultivated a soil enriched for ages by the yearly addition of a fresh stratum of mould. From the first existence of vegetation upon the dry land, decayed plants, leaves, &c., have continually furnished a supply of manure, which the winds and rains have liberally spread abroad. As the supply was annually greater than the consumption, the earth, unexhausted by its productions, increased in fertility. The thick layers of vegetable mould which covered the face of the earth, was a warehouse of food for plants, and this quality increased by the conversion of wood into ashes by clearing. It is not wonderful, then, that for some years, newly cleared settlements should abound in produce and require little more labour than that of ploughing and reaping, for, during this period, the provision is wasting which for centuries had been accumulating. But the time will come, and indeed has already come in some sections, where the soil has been exhausted, and is too weak of itself to make plants grow with their former luxuriance. The grand question now presents itself, "how shall this soil be renovated and brought back to its former richness and fertility?" My answer would be by breaking the under crust, opening and stirring the subsoil, by which means it so alters and disposes the earth in which plants are rooted, that the radicles shoot more easily and more extensively through it, or in other words, it becomes a better filterer for straining and applying nourishment to their inhaling or absorbing vessels.

It is a well established fact or axiom in agriculture, that the deeper the soil is, the more favourable will it be for the purposes of cultivation. To produce this desideratum, several plans have been adopted, either by thoroughly trenching with the spade, or by the use of the subsoil plough. Air and water are chief instruments which nature makes use of to enrich the earth.

It is by close attention to passing events that any desired object can ever be obtained. As far as experiments have been made, we find the earth liberally affording its produce in tenfold quantity, and the land that now supports an hundred inhabitants, may give equal enjoyment to a thousand. But in this state a well managed farm must be carried on with more labour, more expense, and more exact skill. The most profitable system of culture is that which pays the greatest per cent on the money laid out in cultivation, while the land is yearly increasing in its productive powers, is a truth which no one will attempt to deny.

I have, for the last four or five years, had my attention directed, by reading in the agricultural journals, to the great benefits derived from subsoil ploughing in England and Scotland, and have felt very anxious to obtain an implement for the purpose. For the last three or four years, I have been making some experiments with mere an apology for a subsoil plough, as it only penetrated about five inches below the bottom of the furrow of the common plough, and the share was thin, flat, and only three inches wide at the broadest part; still, with this simple, and I might say, inefficient machine, I could see a very perceptible difference in the appearance of the crop, especially in a drouth. In 1841, I made an experiment in a field of corn, a part of which I subsoiled with my skeleton or apology for a subsoil plough, stirring the under soil only to a depth of five inches; in that part of the field where the under crust had been broken, the corn manifested a healthy, dark colour, while that adjoining, which had not been stirred with the

skeleton plough, turned yellow, leaves curled and looked sickly. In fact, the difference was so great that it was noticed by those passing, although some distance from the road. I also tried it for my carrots and beets, with the same decided effect. I have tried it on stiff loam, and on soil inclining to sand, with equal success. This I was not prepared for, as I supposed such soils would not be benefitted by the operation; but on examination, I found the subsoil, which had not been reached by the common plough, very compact, and nearly as hard as a beaten track on the surface.

As for myself, and from my own experience, I entertain not a doubt of the utility of deep ploughing; not, however, by turning up the under soil, but by following in the furrow made by the first plough, with a real subsoil plough, which, if properly constructed, pulverizes and stirs the earth from twelve to fourteen inches. Indian corn, and all tap-rooted plants, in such a mass of loosened earth, would not, I am confident, suffer much by an ordinary drouth. Like a sponge, it would absorb a vast quantity of rain water, and become a reservoir to supply the wants of the plants. Nothing is more common in a dry summer, than the rolling of the leaves of corn, and the circumstance is often mentioned as an evidence of the severity of the drouth.

There is another advantage in subsoiling. If the season is wet, it has the effect of partially draining the land, and causes the water to settle and carry with it any vitriolic or other obnoxious matters.

I am not aware that subsoil ploughing has as yet, in this country, received much attention; but from my own experience, and several experiments made by different persons in different sections, and with very indifferent implements, the results have been such that I am led to believe that it will prove of very great advantage on old soils, that have been long under cultivation.

E. Phinney, Esq., a very spirited and successful farmer, in Lexington, Mass., in a letter published in the *New England Farmer*, in speaking of an experiment made with a substitute for a subsoil plough, in a field of carrots, says, "A part of my crop of carrots was sown upon the same land appropriated to that crop last year, no more manure was applied than in the previous year, and notwithstanding the severe drouth, which greatly injured most of our root crops, my crop on this piece of land was nearly double that of last year. There is no known cause to which I can attribute this great increase of the produce, but the use of my new constructed substitute for a subsoil plough. The soil was stirred to the depth of fourteen inches; by this means the roots of the carrots were enabled to strike deep, and thereby not only to find more nourishment, but to overcome, in a great measure, the effects of a very pinching drouth."

It is stated in the *New England Farmer*, "that B. V. French, Esq., of Braintree, Mass., raised the past season, over 22 tons per acre of white carrots, on ground not particularly well prepared for roots. He attributes this great crop principally to the use of the subsoil plough on the land the previous season."

The subsoil plough has been tried in Pennsylvania and Delaware, but I have not as yet seen any account of its effect on the crops. For deep rooted plants, no one, I think, will pretend to gainsay. Why do our gardens produce so much more to the acre than our fields? Is it not, in a great measure, owing to the deep tillage and mixing the under with the upper soil?

Mr Smith, of Deansdon, to whom is awarded the credit of first successfully introducing the

subsoil plough, in a lecture delivered before the Royal Agricultural Society of England, in July last, says, "When I first began to cultivate my own farm, although I had put in the drains, I found they were not so efficacious as I at first expected; and I then began to think of stirring up the subsoil, which gave rise to the idea of a subsoil plough. I thought I must construct an instrument which would execute the work with the least possible power. I made my plough very strong, and of that form to which the least resistance would be opposed, at the same time taking care to have sufficient power fairly to stir up the soil.

"I will here explain the principle of the subsoil plough, because I have found that many persons, although seemingly acquainted with it, have not a proper notion of the principle on which it is based. The great principle is, that there are many subsoils, which, though capable of being converted into good soil, yet if brought up and mixed with the active soil, will so far deteriorate it as to make it for some time sterile. It therefore occurred to me, that the great point would be to stir up the subsoil, still retaining the good soil on the surface. Stirring up the subsoil would, in the first place, very much facilitate the escape of the water into the drains; and secondly, in consequence of the passage of the water through the stirred up subsoil, and the attendant admission of air, it would be so acted upon as to be converted into good soil, while, at the same time, I was having all the advantages of working the active soil as before."

Having treated of the process, and noticed some of the advantages derived from subsoil ploughing, I will now endeavour to give a description of some of the implements made use of for that purpose, three of which are of European, and one of American manufacture. In proof of the estimation in which subsoiling is held in England, I would state that no less than eight subsoil ploughs were entered for competition and exhibition at the Fair of the Royal Agricultural Society, held in Bristol in July last.

The subsoil plough is not a new invention, but was in use in England, more than fifty years ago, and recently brought into prominent notice by Mr. Smith, of Deansdon, Scotland. In Dickson's Report of Lancashire, is the following notice of the "Miter or deep-stirring plough."

"There is another tool of the plough kind, somewhat similar in construction, which was introduced into the country about the same period as the 'Trench plough.' It simply consists of a ploughshare firmly fixed to a strong beam by means of a strong sheath and handle, without any mold board. It is usually drawn by four or more horses, being made to follow in the furrow of the common plough, so as to penetrate into, loosen, and stir up the under soil, without turning it up, to the depth of from eight to fourteen inches below the track in which that plough had gone."

The following description of it is taken from Mr. Morton's prize essay, published in the "*Farmer's Magazine*," (London), of July last. Mr. Morton says, "Smith's subsoil plough consists of the ordinary frame-work of a plough without the mold board, made strong enough to stand the shock and the strain to which an implement requiring the force of four or six horses to work it, must be subjected. The frame-work is of iron, and about 15 feet long. A sole plate, on which a feather shaped or pointed sock slips, is attached to it by means of two uprights or curved coulters. The height of the plough, when held in a working position, from the sole-plate to the beam, is about 22 inches. From the furrow side of the

rock, a spur projects, over which the mass of subsoil, cut by the coulter and share is raised and broken, and falls down again."

Now the American subsoil plough, made at Worcester, Mass., by Messrs. Ruggles, Nourse & Mason, differs from Smith's in several particulars. The handles and beams are made of wood, reduced in length, and in fact the whole implement is reduced in size, which makes it much lighter, and can be turned in the same space as the plough which precedes it. In place of the spur, as in Smith's, this has an inclined plane, which rises from the feather of the share, and extends back to the heel of the plough. It is about three inches wide, lies against the upwright, and rises to the height of six inches behind. By means of a slot in the point of attachment, it can be raised or lowered at pleasure. With this inclined plane the soil is raised, pulverized, and partially mixed, leaving it in a loose, friable state, without bringing it to the surface. By this simple contrivance the draft has been so much reduced that two common sized horses are amply sufficient to work it in a stiff, loamy soil, from eight to ten inches below the bottom of the furrow of the plough that precedes it, but it must be free from roots and large stones. The greatest improvement, however, and especially at the present time, is the price, at which they are offered, being less than one-fifth of the price of the imported article. One of Smith's was imported in 1840, by Messrs. Ellis & Boston, of Boston, at an expense of \$80. D. D. Campbell, Esq., of Schenectady, imported another about the same period, or soon after.

I have tried the Worcester subsoil ploughs, and can say I was much pleased with its performance, and more particularly with the ease in which the horses performed their work. Now, if the plough turns up a furrow six inches deep, and the subsoil plough penetrates and loosens the subsoil ten inches below the first plough, we have, at least, sixteen inches loose soil, which in the common method of ploughing, and allowing that the plough lays the furrow two inches higher than the depth of the cut, we have then but eight inches of loose soil for the bed of the plant.

The expense of cultivating by subsoil ploughing must be necessarily much increased by the present mode, as it requires an extra hand and team to go over the same ground, and at the same time of the first plough; and to diminish the expense of the operation of subsoil ploughing, and to adopt them to the wants of the small farmers, several attempts have been made, in England, to combine the two implements in one. The first of these, by Mr. Pusey, called the Charlbury Subsoil Plough, "combines in the implement," says Mr. Morton; "both the ploughs used in the operation of subsoiling. It not only subs the subsoil, but opens the furrow in which the subsoil plough works. It consists in the attachment of a strong tine, similar to those used in Biddle's Scarifier, to the common plough, in a position in which it acts after the furrow slice has been turned."

"This implement," continues Mr. Morton, "doing all the work, requires, according to an experiment recorded there, less force to work than the subsoil plough, doing only one portion of the operation. It cannot, however, be so efficient in thoroughly stirring the subsoil as the original plough." The other attempt at diminishing the expense of subsoil ploughing, is by Mr. Armstrong, of Stirlingshire, for which he received premiums from the Stirlingshire Agricultural Society, and from the Highland Society.

The following is a description of it, as given by Mr. Smith, at an agricultural meeting. It appears that the inventor has adopted the prin-

ciple of Walkie's turn-west plough to Smith's subsoil plough; and if I understand the principle of it, it is just what the American farmer is in need of, as one hand with one team can perform both operations.

The general frame-work is that of a subsoil plough, rather under the medium size, and to it is attached a hinged mould-board, similar to the mould-board of Smith's hill-side or turn-west plough. By means of this arrangement, the plough can be used for removing the furrow preceding the operation of the subsoil plough, and when the furrow has been removed, the mould-board being moved upon its hinges, from its working position, rests over the beam of the plough, whilst the instrument is used for subsoiling in the bottom of the furrow just removed. Thus the operation of removing the furrow and subsoiling, can be alternately performed with the same implement, with the same ploughman, and the same team of horses, by a single movement of the mould-board, which is done in an instant by the hand of the ploughman, at each turning. The additional weight of the mould-board serves to keep down the plough whilst subsoiling in different grounds. The judges consider this implement well contrived, and as being an important boon to the small farmers, and as certain to give great facility to the extension amongst them of the admirable system of subsoil ploughing.

(From the Farmer's Cabinet.)

THE TOMATO.

We often hear it said, that a relish for this vegetable is an acquired one; scarcely any body at first, liking it, but eventually every one becoming fond of it—if not prepared in every way, at least when prepared in some way or another—or it may hap, raw, without any preparation at all. It has, indeed, within a very few years come into very general use, and is considered a particularly healthy article. It delights in rich ground, and is an abundant bearer. No farmer's or cotter's garden should be without it. His family, if like the writer of this, will soon want their tomatoes,—once, twice,—three times a day,—morning, noon, and evening! A nice way to keep the plant erect, and the fruit from the ground, is to drive down four stakes, so as to make a square of, say, two feet each way, around the plant, and then wrap three or four wips of straw or matting, at suitable distances around the stakes. These will keep the vines from falling, and expose the fruit nicely to the sun for ripening. They will bear till frost.

I have already said I am a great lover of tomatoes; and as this is their season—and as housekeepers, as well their lords, have been invited to throw in their mite to make the Cabinet useful—which, by the way, I take pleasure in looking over—I thought I would call some receipts from my book. Do with them as you like. Though they may have been published before, they may perhaps, again be worth their room.

SUSANNA P.

Newcastle, Delaware.

TOMATOES, INSTEAD OF CUCUMBERS.—Treat them much as you would cucumbers. Peel, and slice them; season them with plenty of salt—pepper and vinegar to your taste.

TOMATO KETCHUP.—Take your tomatoes, ripe and peeled, in a brown earthen pan, in a cool oven; then press out the juice and pulp through a sieve. Next to each quart of juice and pulp add $\frac{1}{2}$ lb. of salt, 1 oz. of shallots, (or onions,) 1 oz. ground black pepper, quarter of an ounce mace; the same weight of allspice, ginger, and nutmeg. Round the spices together, and boil them with the tomato pulp half an hour; then pass the mixture through a sieve, and when cold bottle it. This will keep good for years.

TOMATO SAUCE.—Take ripe tomatoes, cut them in two, press out the pulp and separate the seeds; then put them into a skillet with some savory sauce and a little salt. When of the thickness of pea soup, rub it through a coarse cloth, boil it to the consistence of marmalade, put it into jars, and in a day after pour over it lard or butter, and in down with oiled paper.

STEWED TOMATOES.—Peel, slice and stew them slowly. When done, season them—thicken a little and put in a small lump of butter, and eat them as you would apple sauce. If you have them thus prepared, with good roast beef, properly manufactured—wrest potatoes, and lima beans,—and President Tyler should pop in upon you, unexpected to dine, you need wish nothing better; you'll find them first rate.

TOMATOES WITH BERRY-SAUCE.—Cut them in two, lay the flesh side upon the gridiron, over pretty hot coals, for a few minutes—turn them—season them well with pepper and salt, and when done dress them with butter, or eat them with gravy, as suits you best.

TOMATO PRESERVES.—Prepare a syrup by clarifying sugar, melted over a slow fire with a little water, boiling it till no scum appears. Take the tomatoes when quite green, peel them, and put them in cold syrup, with one orange sliced to every two pounds of your fruit: take pound for pound of sugar; simmer them for two or three hours over a slow fire. When a superior article is wished, add fresh lemons sliced, and boil with the tomatoes a few peach leaves, and powdered ginger in bags. Tomatoes even when ripe, make a fine preserve, treated as above; but unless great care is used in the process, they will fall to pieces.

TOMATO FIGS.—Take six pounds of sugar for one peck, or sixteen pounds of the fruit. Scald, and remove the skin in the usual way. Cook them over a fire, their own juice being sufficient. Put out the addition of water, until the sugar pebbles, and they are clarified. They are then to be taken out, spread on dishes, flattened and dried in the sun. A small quantity of the syrup should be occasionally sprinkled over them while drying; after which pack them down in boxes, treating each layer with powdered sugar. Boil the remainder of the syrup, and bottle it for use. They will keep from year to year, and retain a nice flavour. The pear shaped, or single tomatoes, answer the best purpose.

TOMATO TART.—Roll out your dough very thin, and place it on the place in which you intend baking your tart, and slice your tomatoes very thin, spread them over the dough also very thinly, take about two table spoonfuls of brown sugar, and one of ground cinnamon bark, spread the two over the tomatoes, bake it well, and you have a fine tart.

PICKLED TOMATOES.—Place your tomatoes in layers, in a pickling jar with garlic or sliced onions, mustard seed, horse radish, red pepper, spices, &c., as wanted, until the jar is filled. A little salt must also be added, as the layers are put in. When the jar is filled, pour over the tomatoes, good cold cider vinegar, till all are covered, then close up tight for use.

TOMATOES FOR WINTER.—They may be preserved for winter use, by placing them in layers with salt, in jars or tight boxes. When wanted they must be soaked in water, as you soak cucumbers preserved in the same way. Some stew the tomatoes till well cooked, then spread the inside on plates, or other smooth surfaces, and dry them fully, when they can be put in bags and kept in a dry place.

Some are fond of them raw—eating them as we eat an apple.

BROOM CORN.

BROOM CORN is much cultivated, and with success, in some towns on the Connecticut river, in Massachusetts. The amount produced on one acre, varies from eight hundred to one thousand pounds, besides sixty or seventy bushels of seed. The brush is sold to be worth four or five cents per pound, in 1837, it was worth twelve and a half cents per pound. The seed on an acre, at thirty-three cents a bushel, is said to be equal to a crop of oats. In Northampton, and its vicinity, not less than one thousand three hundred acres are thus cultivated, worth, for the brush and seed, \$100,000. The seed usually weighs forty pounds per bushel. The manufacture of brooms in a small town, Hadley, in Massachusetts, is estimated at \$160,000, eighty thousand brooms were manufactured by one man in a year. To a limited extent, this culture of the broom corn and its manufacture, might be yet more extensively engaged in with advantage. The process of cultivation is similar to that of maize or Indian corn.—*Berkshire Far.*

ADVANTAGES OF SCIENTIFIC FARMING.

When land covered with an old growth of wood is first cleared, the soil is always in a state that will produce good crops for a number of years without manure; but after the lapse of a sufficient time to rot the stumps, it begins to fail. It is then generally ploughed and worked without much manure till it no longer pays for the labour; when it is allowed to become a pasture, and another piece of wood land is cut down and cultivated in the same way.

These pastures, on what was originally not the best kind of land, will grow poorer for fifty years; the best kinds of grass disappearing one after the other till nothing is left but "poverty grass," or "animated oat" as it is sometimes called. This soon follows the others, and there being now very little that cattle will eat, the ground is occupied by mountain tea, mayflower, and other wild plants, soon followed by dwarf laurel and creeping juniper. The ground now begins slowly to improve, having a covering of vegetables to protect it from sun and wind, and a strong turf which defends it from having its finer parts washed deep into the earth by rains. It will now, if neglected, become again covered with wood, and finally again become fertile.

This impoverishing mode of farming upon new land is not peculiar to Nova Scotia. It has been generally practised in the American States, and many there who had farms from which they procured a comfortable living, have worn them out and removed to the far West to begin again upon new land. It is not two centuries since a very large proportion of the land in Europe was in this worn out state, but since the skill of the scientific farmer has been applied to its cultivation, much that was nearly worthless has been made very productive, and now supports three or four times as many people as it did a hundred years ago.

An English gentleman, formerly travelling through a very barren part of Germany, where very little cultivation was to be seen, but only large plains covered with heath, was surprised by discovering a very rich farm covered with excellent crops of various kinds in the midst of the barren. He found that it was owned by an old Austrian soldier, who having performed some extraordinary service, had been rewarded by the government with a tract of this barren heath, upon which a house had been built for him. He had served a long time in Flanders among a people who were skilful farmers, and had paid particular attention to the way in which they managed their land, which had convinced him that the same kind of cultivation that he had seen so successful on the poor sand of the low countries, would answer as well in Germany. He had therefore requested the government to give him this land to try his skill upon. He had chosen a place not far from a town which would serve as a market for his produce, and which was so dirty that he knew it would supply him with manure. He commenced with a small piece which he broke up very deep, and manured highly, and found it produced a very great crop. He continued breaking-up and cultivating according to the Flemish mode, and had at that time sixty acres in the highest state of cultivation; all fenced in ten acre lots with handsome hedges. He was then a rich man, and owed his wealth to the knowledge he had acquired in Flanders, without which he would have lived poorly upon the small pension that was allowed him.

Scotland was from time immemorial accounted one of the poorest of countries, but the last fifty years have made a wonderful

change. A better education has been given to the people, and agricultural science has more than doubled the produce of the land.

For a considerable time men of abilities in the American States have perceived the folly of their exhausting mode of farming, and have gone to work in earnest to improve their worn out land, with such success that they have changed the crop of Indian Corn from fifteen to fifty bushels an acre, and that of hay from less than a ton to two and a half and three tons, and have found in many instances that, notwithstanding the additional expense, the very great crop was much more profitable than the small one, even in the first season, while the good effect of the extra quantity of manure continued for several of the following seasons. They have generally found it most profitable to work no more land than they can keep very rich, and for this reason exert themselves to collect and preserve as much manure as possible. The urine of the cattle and the wash of the kitchen are preserved by turning them upon sods or swamp mud which imbibe them.

Much advantage is derived from a mixture of different soils, sand and gravel are useful upon clay, and clay improves a soil that is too sandy. Considerable portions of the Eastern States resemble the Southern front of Nova Scotia, the soil, like ours, resting upon what is called "primitive rock," and, of course, inferior to that which lies upon sandstone and limestone. In this district, which is often very stony, swamps are found to be the most valuable land for grass. They are drained, have an inch or two of upland soil spread over them, followed by a dressing of manure, and are then sowed with oats and grass seeds. Clover stands the winter very well upon drained swamps. They should ever have the turf burnt, for the effect of burning would be, to give two or three heavy crops, and then leave the land in such a barren state that it will be nearly worthless.

Sea sand that has a mixture of mud and shells is very useful on drained swamps.

Gravel, containing many small stones, seems to answer better on some swamps than a finer soil. I have seen a small piece covered about four inches deep with a gravelly soil, of which one-third at least was small pebbles, having been dug three feet below the surface in making a cellar. It was moderately manured with rotted dung and sowed with Timothy, of which it gave a large crop for five, or six, years before it required manure again.

Shallow swamps are better for draining than those that have a great depth of peat or swamp mud.

It is generally necessary to make a small ditch adjoining the upland entirely round the swamp, which should be cut a few inches into the solid ground to catch the springs that come from the hills. Earth is best carted upon a drained swamp when it is frozen, if it has been previously thrown into large heaps, and covered with spruce boughs.

Clover and upland grasses may be easily introduced into a drained swamp without breaking it up, simply by giving it a top dressing of manure; but, if it is broken up, the grass is exposed to be thrown out by the frost, unless the ground has a large quantity of upland soil spread over it.

Upon clayey hills such as are found at Lawrence Town and Three Fathom Harbour, the crops fail in wet seasons for want of drains, the land retaining so much water about the roots of the crop that it is nearly drowned. Upon such land a coat of swamp soil ploughed in deep, by going twice through every furrow, is very useful. Water passes readily through

peat, and a layer of it below the surface would always yield a passage to the superfluous water. In the middle of the garden at the North Barracks there was a piece of ground which, though well manured, would never produce a tolerable crop; upon examining it, it was found to have under it, at the depth of about ten inches, a bed of hard red clay which water could not pass through. Mr. Dalton, the gardener, brought in twenty-five loads of peat from the swamp, back of the Citadel hill, and had the ground trench-dug fifteen inches deep, putting five inches of peat at the bottom. This ground has since been as good as any part of the garden.

Small stones should never be very carefully taken off clayey ground. In England, people who had hired children to pick all the small flint stones off their land, have since been glad to cart them back, and spread them again. Almost any soil will, by manuring, for a long time, become clayey, for both stable manure and swamp mud will slowly change slate to clay, and blue whinstone to white sand and clay.

When swamp soil is used to mix with manure, it should be remembered that there is a great difference in swamps. Those which are shallow and in situations where the water from the hardwood hills has brought leaves upon them, have a more fertile soil than the deep peat bogs formed wholly from the remains of the trees and plants of the most barren kind of land. The peat of the barren is best for fuel, but of little use upon the land farther than serving to make it more loose and open.

The peat from the barren swamp is, however, the best to plough in deep for the purpose of draining the land, because it does not quickly change to mould.

It is often the case that the inhabitants of a rough rocky region like the southern front of Nova Scotia, when they hear of lands where great crops are raised for a long time without manure—where the ground is level, mellow, and free from stones—and where there is little or no winter, wish that they were inhabitants of such a climate, and that they could leave their children where they would not be compelled to work as hard for their living as they have done themselves. Such wishes are very natural, we all carry about a spirit of discontent, and an aspiration after something better, and are as unwilling to see that the cause of our discontent is in ourselves, as we are to look steadily at the sun; we therefore ascribe it to the lack of something we have not, but which we wish we had, and not a few believe that all that is necessary, to make them happy would be found by removing to some other region, which appears a second Eden to their fancy, yet if they try this expedient they always fare like the man who removed from a haunted house, who as he stood by the truck that was taking the last load, was addressed by a neighbour, who said, "So you are leaving us." "Yes," replied the Devil, popping his head out of the bung-hole of an empty cask, "We are all a-going." But, unfortunately, the region where discontent will not follow us has not yet been discovered.

Near the seaboard of the Eastern States the soil is generally poor and rocky. The climate so cold that the corn is often injured by the frost, yet the inhabitants of this poor land are not the least wealthy portion of the Union. In Europe there is no district which has so fine a climate and soil as Italy—none where the people are more miserable and oppressed. A woman dare not walk into Naples, and sell a basket of eggs or butter, till she goes to the Custom-house and pays a tax upon it; if her children are calling for bread, she dare not bake a cake for them—she must go to the oven

belonging to the King, or the lord of the land, pay the tax, and bask there. If there is a great crop of olives, some farmers are obliged to let them rot, because they are not allowed to make themselves a press, they must pay the lord for the use of his, and often he does not have enough when the crop is good. There are lawyers unnumbered, but no justice can be obtained in a court, and the country would not be at all habitable, were it not that some thousands are annually assassinated. The oppressor knows that if he provokes a man beyond all bearing, the oppressed person can readily hire a Bravo to kill him, and to these murderers, by profession, the people are indebted for the little protection they have. The East Indies is a fertile country. It is said that sufficient food could generally be raised in one year to support the inhabitants for three; yet we often hear of thousands dying there with famine. From the evidence on Mr. Hastings' trial, it appears that a collector goes to gather the taxes, attended by a party of soldiers, carrying cords and whips, and that he frequently finds all the huts of a village empty, the inhabitants having heard of his coming, and run away. This was never the case in Sweden or Norway, nor will it ever be the case in Nova Scotia. The greatest evils that mankind suffer come from their fellow men. They who live by the labour of others will always lay as heavy burdens on the labouring class as they are able and willing to bear, but men who are always obliged to work hard to procure a living, and to face the storms of a Nova Scotian winter, will necessarily retain so much strength of body and energy of mind, that they will never submit to unreasonable impositions. Upon a very fertile soil, in a very mild country, the human race degenerates, indolence reduces them to such a state that they become the prey of all who choose to plunder them. India has often been overrun and ravaged by the hasty inhabitants of the North.

The man who is weary with hard work, finds great pleasure in resting, and sometimes thinks that if he could live without work he should always enjoy this pleasure; but this is a delusion. We must pay for all our pleasures in this world; without hunger and thirst, we can have no pleasure in eating and drinking, and without weariness we cannot rest. No man is happier than he, who by constant hard work procures a comfortable living. Few are more discontented than they who have the means of living without doing anything. The farmer has no cause to envy the merchant, he whose only exercise lies in calculating and writing, often feels a depression of spirits more unupportable than great bodily fatigue. A proportion of those who become merchants, acquire wealth which enables them to live at an expense which few farmers can afford, but be it ever remembered, that all the wealth of the Indies can never purchase cheerfulness, sound and refreshing sleep, and a good appetite—of these good things no class upon earth has a greater share than the farmer, while at the same time he has the satisfaction of knowing that his employment is always both innocent and useful, and that he is not enriching himself by impoverishing others.—*Hatifax, N. S., Colonial Farmer.*

From The Southern Planter.
PROPER DISPOSITION OF FARMING CAPITAL.

Mr. Eppron.—Every man in this country is more or less interested in the pursuit of agriculture, and the business of a commission merchant has rendered me as deeply sensitive to its interests as if I were directly engaged in its pursuit. After much consideration and attention, I am inclined to think that the want of success in this profession, proceeds from an

error that I have frequently observed in my own. This consists in an attempt to do a larger business than is justified by the quantity of capital employed. It is true, that sometimes a "lucky hit" in trade will make all right, but ninety-nine times out of a hundred, failure is the inevitable result of an expansion disproportionate to the quantity of capital to be commanded.

How often do you see an individual with a limited capital embarking in the profession of a farmer, expend it all in the purchase of his land, which is about as reasonable as it would be in a merchant to sink his whole capital in a warehouse, without leaving any for the purchase of goods. Neither the one nor the other would be wiser than the silly fellow, who expended his last cent in the purchase of a purse.

I have grown grey in the pursuit of commerce, and it may be deemed presumptuous in an individual engaged in one pursuit to pretend to advise those in another calling, but the looker on can sometimes see what escapes the attention of the player, and for the last forty years I have been a not inattentive or uninterested spectator of the progress of an art on which my own pursuits were founded, and with which they were so intimately blended. It seems to me, then, nothing would more promote the cause of agriculture than a judicious division of the capital embarked in it. To make this division constitutes a rather difficult sum in arithmetic, one of the quantities only being known, but a practical man with a little calculation, can readily approximate it without even a recourse to algebraical signs. Suppose an individual desires to engage in farming, and that he has, we will say, ten thousand dollars to embark in the business. The first object is to ascertain how much land he should buy. Let him remember that it is only a certain degree of fertility that will pay for cultivation, and that within reasonable limits, the greater the fertility the greater will be the profit upon the investment. My advice to him would be to be satisfied with nothing that would not yield eight barrels of corn and twenty bushels of wheat at least, to the acre. We will suppose that such land in the location he chooses will cost forty dollars an acre very well, let him reserve four thousand dollars to purchase negroes, stock, implements, &c., and to afford him floating capital for at least one year's operations. This leaves him six thousand dollars for the purchase of one hundred and fifty acres of land. It is a small farm, it is true, and the owner could not be esteemed a great landed proprietor; but it is well stocked, well provided, very productive, and the owner with every thing well fixed and comfortable, free from debt and with a provision for accidents, is enabled to devote his whole energies to his business. How certain in such a case would be the annual improvement of his land, or the annual extension of his acres.

But let us contrast with this operation the course usually pursued by those investing in real estate. From an inordinate desire that seems to be born with us here in the South, to be the owners of "broad acres," the whole capital is expended in an extensive and barren waste, or probably half the purchase money paid, and a debt incurred for the balance. Little or nothing left for stock or implements, which are probably bought on credit, and are frequently of the rudest and poorest kind. Already saddled with a heavy debt, the interest on which begins to stare him in the face and haunt his imagination in his dreams, what does it avail to tell this poor wight of some improved implement of agriculture, or of a judicious system of husbandry? Why, if you advise him to pay a dollar a year for an agricultural newspaper, he replies, and with a

great deal of truth indeed, that "he can't afford it." There is a perpetual struggle upon the part of this great land owner to keep body and soul together, and instead of ease, thrift, and improvement, he exhibits from year to year the increasing marks of care, poverty and want; until at last his great estate slips through his fingers and falls into the possession of some individual, perhaps, who, having the means of improvement, doubles or quadruples the product, and thereby makes the whole an excellent investment.

It may be said that land worth forty dollars cannot always be found in situations to which particular circumstances may confine an individual. Let the purchaser then give ten dollars an acre for one hundred and fifty acres, and reserve the balance of the six thousand dollars for improving it; he must be very unfortunate indeed if he does not succeed in a few years in bringing it up to the forty dollar standard.

What I mean to maintain is, that it would form a much more profitable investment, generally speaking, to buy one hundred and fifty acres of such land for fifteen hundred dollars, keeping thirty-five hundred dollars to improve it, than to pay the whole six thousand dollars for six hundred acres.

I have been led into these considerations by conversations which I have held with many of our farmers, who, apart from this common error into which they have fallen, are sound and judicious men. I have found universally a much greater want of ability, than of desire, to improve. I say ability to improve, because I believe the improvement of poor land without money is a very slow business; to a man in debt, it is unattainable.

A MERCHANT.

CRANBERRIES.

"The species of cranberry most commonly found in the United States, has been described as an indigenous, low trailing vine, growing wild in bogs and meadows, and bearing a beautiful red berry of an exceedingly sour, though agreeable taste, which is much used in domestic economy for tarts and sweetmeats. Mr. Kendrick, of Boston, says the cranberry is a plant of easy culture, and not a doubt exists that meadows which are now barren waste or yield nothing but coarse herbage, might be converted into profitable cranberry fields, with but very little expense. According to Loudon, an English writer, Sir Joseph Banks introduced the cranberry into that country from America, and in 1831, raised 3½ Winchester bushels on a square of 18 feet each way; which is rather more than equal to 400 bushels to the acre. Any meadow, it is said, will answer for their growth. They grow well on sandy bogs after draining. If the bogs are covered with bushes they should be removed; but it is not necessary to remove rushes, as the strong roots of the cranberry soon overpower them. It would be well, however, if the land could be ploughed previous to planting with cranberries. Capt. Henry Hall of Barnstable, who has cultivated the cranberry more than 20 years, usually spreads beach sand on his bogs, and digs holes four feet distant each way, the same as set corn, though somewhat deeper. In these holes he plants sods of cranberry roots, and in the space of three years the whole ground is covered with the vines. The planting is usually performed in Autumn, when the bogs are drier and can be better dug or ploughed than at other seasons of the year.

"A Mr. Hayden of Lincoln, Mass., is said to raise 400 bushels of cranberries yearly, which bring him \$400, in the Boston Market—sometimes more. An acre of cranberries, in full bearing, will often produce 200 bushels, and although a moist soil is best suited to the plant, yet with suitable mixtures of bog earth or mud it will flourish, producing abundant crops, even in a comparatively dry soil."—*Dover N. H. Gazette.*

AGRICULTURAL EDUCATION.

From Evans' Letters on Agricultural Improvement.

Whatever doubts may exist on other questions, there can be none that those who should constitute the YOUTH of British America, should be properly educated, or they must be unfit to occupy the situation they fill, with either credit or advantage to themselves or to the community. I have already said there are many subjects connected with agriculture, which have a great influence on its prosperity, and that cannot be understood by the uneducated. Among the number, are the means of internal communications, which would require to be ample, in an extensive country circumstanced as this is, exporting her own produce, and importing the produce of other countries in exchange. For these purposes railroads, bridges, and navigable waters, are most essential, and in promoting these improvements there is not a class of the community that should be more interested than the agricultural, though hitherto they have scarcely taken any interest in the matter. Where they ought to lead, their own neglect has left them to be shut out altogether. I am aware they have not capital to construct these works, but they have land to produce what would employ the works after they were constructed, and without this produce such works would be useless. It is a product raised from the soil of Canada that must support these public works, and refund the money expended in their construction. Whether the produce of the soil is transported by railroads, bridges, and navigable waters to be sold to the merchant or tradesman, or the merchandize be conveyed by the same means for the supply of the agricultural population, the cost of transport, both ways, must be paid out of the produce of the country. It will be deducted from the value of what the farmer sells, and it will be added to the price of the merchandize he buys. A farmer in Upper Canada, or in any other distant settlement, who sells wheat that is subsequently shipped at Montreal or Quebec, or consumed in these cities, must sell it at a price that will pay for transporting it to those places, and the goods that are purchased in Upper Canada or other distant places, are charged with the cost of transporting them from the port of Quebec to Montreal. I do not complain of this, because it is perfectly reasonable it should be so; but I would wish to show farmers that from these facts it is plain, that the better and cheaper the means of internal communication throughout the Provinces, the greater will be the value of their produce to them, and they will be enabled to purchase the merchandize they require at a lower price. Hence it is manifest they will be every way benefited, and consequently, should be the first to suggest these improvements where they would be likely to be useful, but only in such situations. There are matters connected with these improvements that require their attention. In England, lately, they have adopted a rule in chartering railroad companies, that will prevent them becoming unfair monopolies, and will subject them to the control of Parliament. They are also liable to all damages that may be produced by their means. These precautions are not less necessary in these Provinces, and it will be the duty of land owners to see that they are provided for. Those who expend capital have a right to every fair privilege, but to none that would be injurious to public interests. These works are generally under the superintendance of those who are no way connected with agriculture, and who in consequence do not much regard its interests. If farmers are not competent to give attention to all these subjects, in which they are so deeply interested, they cannot expect that others will do it for them. It may, perhaps, be considered out of place, that I should introduce this subject here, as it is not directly connected with education, but how are farmers to understand these matters without being instructed? It is impossible they could, and their prosperity will be retarded in consequence.

To the agricultural and other classes I would say, that from whatever funds these public improvements may be effected, it is a product raised in the country from the soil, and the labour applied to its cultivation, that must be the great source of supply for the support of such works. The transport of troops, Government stores, emigrants, and travellers for pleasure, may contribute a part, but it will not be a large proportion. Ample means

of internal communication, and ample production, will go on well together, BUT CANNOT, and will not, prosper separately, unless Canada becomes the carrier of the produce of other countries, and not of her own soil and industry. The St John's Railroad, now in operation, may be said to be thus employed; but I hope it will long continue so. It would be well that agriculturists and others would allow themselves to be persuaded, that it is from a produce raised in this country, that the riches and enjoyment of its inhabitants must be derived, and that from none other source can it be obtained, unless such of the people as have a fixed income from other countries, which they expend in this.

PLAYFAIR, in his "Decline and fall of Nations," says, "If the agriculture of a country be neglected, that country becomes poor and miserable." Again, "The wealth of a nation, like the happiness of an individual, draws the source from its own bosom. The possession of all the Indies would never make an indolent people rich; and while a people are industrious and the industry well directed, they never can be poor." The same author says in another place, "The wants of men increase with their knowledge of what is good for them to enjoy; and it is the desire to gratify these wants, that increases necessity, and this necessity is the spur of action." Education will enlighten men all these matters.

I think it is proper that I offer a few observations here on the present state of agriculture and agriculturists in Canada, I will do so as correctly as I can, and I hope I shall not give offence in any quarter. In every country it is desirable that the condition of the people would go on constantly improving, and in this it might reasonably be expected to be the case, where rent and taxes are trifling, the soil good, and the climate on an average of seasons very favorable. If improvement do not progress under such circumstances, it becomes the duty of men of influence and the well instructed, to examine into the causes that are supposed to prevent it, and provide or suggest a remedy. There may be differences of opinion as to the existing causes that obstruct improvement in a country, and, unfortunately, these differences of opinion have a tendency to perpetuate evils that otherwise might be got rid of, by a cordial co-operation of the influential in society. The subject on which I write, ought, above all others, to be interesting to every one whose home is in Canada; and every man, of every party, should sincerely unite in forwarding every measure that would be considered necessary to increase the produce of the soil of Canada, and thereby augment the means of happiness of all her inhabitants without distinction. It is a most unfortunate mistake, that every one should not be perfectly aware that by advancing the general interests, individual interests will be most certainly and permanently promoted and secured. Few, indeed, can get rich in a country by fair trading that will not produce abundantly. The thing is impossible.

It is deserving of attention, that agriculture has now been a long time practised in Lower Canada by a rural population, that were generally uneducated, and that the system of cultivation, and management of stock, did not undergo much alteration since the country was first settled. If it is found, nevertheless, that the agricultural population throughout the Province are at this moment, in a prosperous state, and their condition constantly improving it would be a convincing proof that their want of education did not operate against their interests, and that they did not require, like other countries, to introduce any change in their system of agricultural management, inasmuch as the old methods succeeded to their entire satisfaction. If such be in reality the case generally, a change is unnecessary, nor would I presume to recommend any. I confess I would not readily change my own habits or modes of action, if I thought them reasonable, and found them satisfactory to myself, without very strong grounds for supposing that by adopting a change, I would improve my condition, and increase my means of reasonable enjoyment. But if I did suppose that a change would produce this good to me, were I to hesitate in adopting it, it would indicate a want of judgment, or perhaps common sense.

We know that in other countries the produce of agriculture has been vastly augmented within the

last few years, and this increase was obtained in consequence of new and improved modes of cultivation, and management of stock being introduced. There is scarcely any country in Europe that are not endeavoring to adopt, and bring into practice, new and approved systems of agricultural management. In France, very great exertions are being made in this way since the termination of the last war, and by late account, vast improvement is effected in her husbandry and stock. The old modes of cultivation, and management of stock in Canada, are acknowledged to be very defective by persons born in the country, and well qualified to form a correct opinion. Though much is said against the climate of Canada, I know that the modes of cultivation that is in many instances adopted here, and may in favorable seasons produce a reasonable crop, would not, if adopted in England, produce a crop that would be of any value.

What is in fact the present state of husbandry and of the agricultural population of the Province generally, and which has resulted from the practice of agriculture under the circumstances I have mentioned? This is a question, I would wish others better qualified than I am, should answer. But as I have no alternative here, I cannot help saying that from my own observation, and from reports, I am sorry to believe, first, that husbandry is not practised on the most approved principles, and does not yield a produce any thing near what it might do under different management; secondly, that it follows as a natural consequence, that the agricultural population generally, are not in so prosperous a condition as they ought to be; and thirdly, that the general improvement of the country does not advance with that progress, which countries do, that are not possessed of so many natural advantages. This is my candid opinion of the state of agriculture in Lower Canada, and perhaps it is not much better in Upper Canada. If, then, such are the results that have been produced by agriculturalists that are confessedly deficient in education, and practising a system of cultivation and management of stock that is long in use, and that is proved to be defective by its consequences, it is unquestionably prudent and necessary that a change for the better should be introduced without hesitation or delay. The present system has been tried a sufficiently long time to give full opportunity of knowing all its advantages; and if they do not prove satisfactory, it is evidently our duty to give a fair trial to a different system, and the only legitimate means to insure the introduction of the very best mode of farming in every department, is by properly instructing every man who is proprietor of, and cultivates a farm in Canada. This will be a reasonable experiment, and one that is necessary independently of the favorable influence it would have on agriculture. Though I could not expect to live to see the practical results of this experiment, yet I do look forward, confidently, that they will be most happy for those who will try the means, and apply them industriously.

PLAYFAIR says—"The great end of all effort is, to improve upon the means which nature has furnished men with, for obtaining the objects of their wants and wishes, and to obviate, so far as possible, or do away those inconveniences and disadvantages which nature has thrown in the way of their enjoyment." Let farmers be judiciously educated, and the occasional inclemency of seasons will not be so injurious in their effects, because the husbandman will be better qualified to understand the most prudent and suitable means to adopt to guard against injury, and to remedy casualties that might occur under extraordinary circumstances.

Man can never discover what he is capable of, executing until he has improved to the uttermost the faculties bestowed upon him by the CREATOR. When he has done this, he may, by exercising them prudently and industriously, overcome almost every difficulty in nature, over which it would be proper or useful that he should have the control. This is a privilege which, I believe, the ALMIGHTY has left it in the power of man to enjoy, and which places him high indeed in the rank of creation. Perhaps the reader would excuse me for introducing Shakespeare's admirable description of a man.—"What a piece of work is a man! How noble in reason! how infinite in faculties! in form and in moving how like an angel! in apprehension,

how like a god! the beauty of the world! the paragon of animals!"

This is truly a flattering description, and he who cultivates ought his natural faculties, and exercises them properly in the situation of life in which he may be placed, will not be altogether unworthy of it, and of the rank in creation which the CREATOR intended him to occupy. On the other hand, how could it apply to an ignorant man that was unable to comprehend even the literal meaning of the description? Man is like many things in creation, of little value comparatively, until polished, and prepared for the duties he has to perform. The rough marble in the quarry has scarcely any resemblance to the beautiful forms it afterwards assumes in the hands of the artist, though he does not change the natural qualities of the marble. So with man in his natural state, and when improved by the proper cultivation of his mind. His faculties are not changed but they are improved, and made better capable of contributing to his own enjoyment and happiness, and of more usefulness to society. I feel fully persuaded in my own mind, that a man was formed in the most perfect possible manner for his situation on this globe, and capable of enjoying every reasonable happiness, if it is not his own fault, or that of his fellow-men to prevent it. It is a melancholy truth that a vast majority of those who people this earth do not cultivate or improve their faculties, and can have no higher enjoyment than those that are sensual, and the gratification of their sensual pleasures appears to be the only end of their being. Who is it that lives in a land of Christians, that would not aspire to higher and more glorious enjoyments than these?

We happen to live in an age of the world when few persons would have the hardihood to come forward and give open opposition to education. They would scarcely hazard their reputation by defending a position that is almost universally considered as degrading. They would not dare to oppose instruction when it was the public opinion that "the more learning people have, the more virtuous, powerful and happy will they become; and that to ignorance alone must the contrary effects be imputed." A French writer, whose name I do not now recollect, says:—"There is but one case where ignorance can be desirable; and that is when all is desperate in a State, and when, through the present evils, others still greater appear behind. Then stupidity is a blessing; knowledge and foresight are evils. It is then that, shutting our eyes against the light, we would hide from ourselves the calamities we cannot prevent." Indeed I believe that this is the only case where knowledge must not prove beneficial to man, wherever he is placed on this globe, and whatever be his rank. Lord Brougham was of opinion that "the farm servant and day labourer, whether in his master's employ, or attending the concerns of his cottage, must derive great practical benefit—must be both a better servant, and a more thrifty, and, therefore, comfortable cottager; for, knowing something of the nature of soils and manures, which chemistry teaches, and something of the habits of animals, and the qualities and growth of plants, which he learns from natural history and chemistry together." And why would not their masters or employers be the better for such knowledge? Need I say more, to recommend useful education for those who have it not? I could go on and write a large volume on the subject were it necessary, and bring forward to my aid, extracts from the greatest and best authors that have ever written a book. I hope, however, this part of my subject may stop here; but, before I conclude it, I shall offer a few remarks on what is termed "Book Farming." Though the information that is to be obtained from publications on agriculture may not be sufficient to instruct men perfectly in the art of husbandry who have had no previous experience of the practice; yet, such books are extremely useful, even to the best instructed farmers. There are few who may not derive some useful information from them of which they were ignorant before. For, farmers who may have some practical experience of agriculture, but are unacquainted with the most judicious systems that have been adopted in other countries, the reading of approved works on husbandry is indispensably necessary for their instruction. There is no other means practicable for

their obtaining a knowledge of it. It was by publications on the practice of good husbandry, the breeding and management of stock, that the vast improvement in agriculture and stock has been accomplished in other countries, and the study of such works is much more necessary for the farmers of Canada, who are proprietors of the soil, than for the farmers Europe, for reasons I have already explained. This would alone be a sufficient motive for education, as without it farmers can receive no benefit from the best works ever were published on the subject of agriculture.

The following extract is from an address by a gentleman lately to an Agricultural Society in the United States:—

In reference to the study of agricultural books he says:—"It is an exact description of the arts written down in letters. It is the collected wisdom of the best cultivators of the earth; it is the noted result of experiment; the detail of theory confirmed. In a word, it is a history of the development of the principles of farming, from the first imperfect efforts of ignorance and isolated means, up to the present time. Now farming is a science, as much as geometry; and it is a knowledge of principles which makes a man a good farmer. A knowledge of these principles can only be obtained by experience; but this experience may be taught by books, and is so taught. So that, after all, we find that a scientific or book farmer, does practice an experience, save that he takes the experience of the whole world, through all time instead of taking only that of his immediate neighbour, and instead—untaught and ignorant of his own."

This gentleman's ideas are perfectly just. For myself, I can say truly, that I would be anxious to see and read all the good books that ever were published on the subject of my profession, and am sure to find what will instruct and interest me.

From the (Halifax, N. S.) Colonel Farmer.

REMEDIES FOR SCAB IN SHEEP.

Youatt recommends as the safest and most effectual application, an ointment made by mixing common Mercurial ointment with five times its weight of lard. A little of this is to be rubbed well in upon the head; a furrow is then to be made from the head to the tail by parting the wool so as to bring the skin in view, and a little of the ointment applied to the skin along the whole of the exposed surface. Another furrow should then be drawn on either side, and the ointment applied, and in this way over the whole sheep, rubbing in thoroughly all the ointment. For very bad cases three parts of lard may be mixed with one of mercurial ointment. This must be aided by giving daily a dose of two drachms (about a quarter of an ounce) of an alterative powder composed of one part of Ethiops. miners, two parts of Saltpetre, and four parts of Sulphur. If the sheep are housed at night the litter should be carefully removed every day, and every place where they are accustomed to rub themselves, frequently washed, otherwise they will be constantly receiving fresh infection, as some of the insects who cause the disease, or of their eggs, will always be left on the litter, and the rubbing pieces. The alterative should not be neglected, as outward applications have often failed wholly to eradicate the disease. Mr. McCully of Amherst, has published an account of the success which has attended the practice of giving Saltpetre to sheep affected with the scab.

FOOT ROT

Youatt's directions are, to cut away every portion of the hoof that is in the slightest degree separated from the parts beneath; also to cut off the fungus granulations (lumps of proud flesh) if of any considerable size, and to clean the foot thoroughly, it is then to be washed with a solution of chloride of lime in the proportion of one pound of the powder to a gallon of water. The Muriate of Butyr of Antimony should then be applied by means of a small swab to every naked part, lightly where the surface has a healthy appearance, and more severely where fungus granulations have been cut off, or others are springing up. If the hoof has been stripped off a considerable part of the foot, it should have a little clean cow pat round it. The foot should be dressed every day—each new

separation of horn removed; and every portion of fungus should have the caustic Butyr of Antimony applied to it. It should be recollected that the foot rot is an infectious disease and proper precautions should be used to prevent its communication to the healthy sheep. Blue Vitriol is used by some persons for this disease.

The following extract from the *Albany Cultivator* is worth attending to, for the natural issue, which in horses and swine is found on the inside of the leg, is, in sheep and deer, placed in the foot.—"All sheep have an issue in the foot, between the hoofs, and when I see one of my sheep limpy, I catch it, part the hoofs, and on the top of the foot between the claws, there are some coarse hairs in the hole of the issue; pull them out, and put one finger under the foot, one on the top, and press them down gently, and there will come out a thick gummy matter which stops the issue from discharging; this does the sheep is well in a few days."

SILAS ADAMS.

HEAD AND HAND LABOR.

The Bangor Whig has the following excellent remarks on the subject of labor:

What honest vocation can be named that does not contribute, in a greater or less degree, to the enjoyment of men? It may be humble, indeed, but it goes to swell the mighty aggregate; it may be the rill that trickles from the mountain side, but it diffuses fertility through the valley, and mingles its drops at last with the ocean. The true American motto is and must be—marked upon our foreheads, written upon our door post—channeled in the earth, and wafted upon the waves—*Industry—Labor is Honorable*, and idleness dishonorable, and I care not if it is labor, whether it be the head or the hand. Away with the miserable jargon of the political economists, who write so complacently about the producing and non-producing classes. It has no foundation in nature or in experience. Whitney, whose cotton gin doubled the value of every acre of land in the South, raised more cotton with his head than any twenty men ever raised with their hands. Let me exhort those of you who are devoted to intellectual pursuits, to cherish, on your part, an exalted and a just idea of the dignity and value of manual labor, and to make that opinion known in our works and seen in the earnest of our action. The laboring men of this country are vast in number and respectable in character. We owe to them, under Providence, the most gladsome spectacle the sun beholds in its course—a land of cultivated and fertile fields, an ocean white with canvas. We owe to them the annual spectacle of golden harvests, which carry plenty and happiness alike to the palaces and the cottages. We owe to them the fortresses that guard our coasts—the ships that have borne our flag to every clime and carried the thunder of our cannon triumphant over the waters of the deep.

HOW TO MAKE MONEY.

Let the business of every body else alone, and attend to your own; don't buy what you don't want; use your time to advantage, and study to make even leisure hours useful, think twice before you throw away a shilling—remember you will have another to make for it; find recreation in looking after your business; buy low, sell fair, and take care of the profits; look over your books regularly, and if you find an error, trace it out; should a stroke of misfortune come upon you in trade, retrench, work harder, but never fly the track; confront difficulties with unflinching perseverance, and they will disappear at last; though you should fail in the struggle, you will be honored; but shrink from the task and you will be despised.

The poorest of all family goods are indolent females. If a wife knows nothing of domestic duties beyond the parlor or the boudoir, she is a dangerous partner in those times of pecuniary uncertainty.

To get on in the world, and be healthy; be honest, temperate, industrious, mind your own business, and be sure to pay for your newspaper regularly.

EMIGRATION DEPARTMENT.

In opening a new department in this journal, it is not the intention of its Editor to deviate from the character of the work, which he has been so anxious to establish, but it is merely his intention to devote a few columns, in each number, to subjects that will embrace a wider field, and, at the same time, be interesting and useful to agriculturists. The geographical position of Canada is such, that the inhabitants of one district know but little of the characteristic features of the neighbouring districts. Hence the necessity for the press interesting itself in developing the resources which each possess. The space which we purpose to devote to this subject is so comparatively trifling, when compared to its magnitude, that it might be considered by some presumptuous in us, to open a department in our journal, in which we can have no grounds to conclude that a great amount of good will be the direct result.

The best apology we have to offer for the course we are about pursuing is, that we have a high opinion of Canada, and are anxious to bring it into respectful notice.

The British Isles are teeming with unemployed capital, skill, and labour; and British America abounds with unimproved fertile land, which, in many sections, cannot be surpassed in the world. These lands may be profitably cultivated by the above unemployed sources of wealth, which is, on all hands, acknowledged to be superabundant in the parent country. Before much can be accomplished for the British North American Provinces, in colonizing them with the virtuous and wealthy portion of the parent country, a more striking and vivid picture must be drawn of their capability of affording a profitable investment of the necessary elements to produce wealth. This picture must be drawn with a skillful, practical, and; we may add, masterly hand, or else, instead of the country being benefited, the result will be similar to that produced from the designing schemes which have, during the last few years, disgraced these provinces, a repetition of which will again be palmed on the public, unless they set their faces against the establishment of a system of re-colonization, which is not only impractical, but would prove to be superlatively injurious to the important rising interests of Canada. It so turns out, that the class of paupers which are most burdensome to England are not the most suitable persons to emigrate to a new country. It is not reasonable to expect that the Government would offer any considerable encouragement for the most active farm labourers to emigrate to a colony, when the services of this class are so highly appreciated at home. The classes we most want here are the least likely to emigrate, unless the colonists themselves take proper steps to induce them to select this as their adopted country.

Our humble efforts shall be thrown in the scale with that portion of the Canadian press who will engage a corner of their journals in

discussing the best method of encouraging emigration to our shores, and, at the same time, recommend proper employment for their capital and energies, which is of equal importance. This department will be as varied in its character as are the topics which will be embraced in the wide field over which we intend to range; and we need scarcely add, that we anticipate that this portion of our paper will be the most interesting and instructive of our magazine.

Owing to a press of business, we have not been able to devote much time or attention to this number, and have been obliged to adopt a very common practice with most of the Canadian Press, of selecting largely from our contemporaries and standard authors. We trust that circumstances will afford due attention to the remaining two numbers of the current volume.

We recommend the following article to the notice of the Canadian farmers and merchants. The Americans, Belgians, Prussians, and other celebrated agricultural countries, are now vying with each other who shall supply the English market. The Canadians ought certainly to take warning by this circumstance, and also adopt means to make the most of the advantages they possess over foreigners in the British market:—

For The American Agriculturist.

THE PROVISION TRADE WITH ENGLAND.

Darien, October 2, 1843.

Experience begins to show that the provision trade with England must be the great trade of the country. She must, within a very few years, draw a large share of her supply of cured provisions from America, and in a great degree from the United States. As the whole subject of the provision trade is new in this country, I propose to give some hints on the best method of sending out, and selling in English markets. On a former occasion, as you are aware, I published the method of curing and preparing pork and beef. The article was extensively circulated, and, I trust, did a good deal of service. In this article I shall confine myself principally to butter, cheese and lard.

BUTTER.—Until there is more system in the method of putting up, and care in making, butter cannot be sent into the English market with any degree of safety, except as grease-butter; and as that must be bought at a very low rate in your market, say upon an average of four cents, to pay the shipper a profit, it follows, that as we now do business, our butter must be consumed at home. I should not recommend any person to ship, until there is a modification of the tariff, so that butter can go in at a much smaller duty than is now levied. If our farmers would only take pains in putting up their butter, it would make a difference of a great many hundred thousand dollars with their profits. If they would work out all the milk, salt with pure salt, and put up in firkins made of thoroughly-seasoned oak, there would be no difficulty in having it keep well in any climate, and insure it for a ready sale.

CHEESE.—This will soon become quite an article of traffic, and the American article may, in a great measure, take the lead in the English market. It is so cheaply made in our

dry climate, and can be so soon cured, and sent into market, that the farmer will find it the most profitable of his dairy products. Here, however, great care is required, or he will lose. The cheese must not be too large, from 40 to 50 pounds, when well cured, is the favourite size, and they must be deep, mildly flavoured, well pressed; and so cured as to keep their shape. A great deal of cheese is spoiled upon the voyage, simply because the whey has not all been pressed out. The hold of a ship is generally very warm, and the cheese gets heated, and, unless well cured, materially injured. In preparing it for market, casks are preferable to boxes, because it will keep quite as well if properly packed, and saves expense, as each package has to be weighed into the custom-house, and it costs as much to weigh a box as a cask, besides it is easier handled in casks. In packing it into casks, two things are of prime importance. 1. That all the cheese in the cask be as near alike as possible in colour, taste, and weight. 2. That there should be a thin board, the size of the cheese, between each one. Half-inch would be thick enough. Some put only a narrow strip of board, but this indents itself into the cheese, and injures them. When nothing is put between them, the cheese get stuck together, and are injured in separating.

LARD.—Lard is worth so much for oil, and oil is in such good demand, that the export will cease in a short time, or nearly so. A good article of bladdered lard will generally pay. Sometimes also in kegs, and a very fair article in barrels. The bladders should be hogs' bladders, and cleaned when taken from the hog. The process is very simple. The bladder is first blown up to its utmost capacity, then turned, washed, returned, and put into a strong clear brine for twenty-four hours; changed again into fresh brine, and in about two days it will be bleached perfectly white, and the end sufficiently cured to keep after the bladder is filled. Much depends upon getting the bladder well bleached. When filled, it is turned inside out, suspended in a tub of cold water, and filled from a cask into which the lard has been strained long enough to get below the boiling point. As soon as filled, it is tied up, and thrown into a large vat of cold water to cool. When put up for market, casks of the size of flax-seed tierces should be used, smaller would be preferable, and the bladders carefully packed between and among layers of clean chaff. In Ireland they use oat-hulls. Great care should be taken that they are kept dry, and do not get burst in the package. None but the very best lard should be put into bladders.

METHOD OF SELLING.—The manner of doing business now is to consign the article to some house in Liverpool. After the consignment has come to hand, it is in due time landed, weighed, &c., and taken into the custom-house if bonded, which is the usual course. The consignee employs a broker to sell. He advertises it for sale at public auction, at some future day. In due time it is put up and sold.

Some little experience in that market satisfies me such is not the best way. Nine times in ten it is in the power of a few dealers to combine and have it at their own price. Besides, the expenses are materially enhanced—because you are compelled to pay all the broker's charges extra. The true way for American dealers is to establish an agency in Liverpool or London, to whom they should send their consignments. He could push them into the market as the price would warrant, and in a very little time have his channels which would be sure and safe. Until such a thing is done, our people will do business very much to a disadvantage.

T. C. PETERS.

FOURTH RIDING OF YORK AGRICULTURAL SOCIETY.

WHITCHURCH, Oct. 21st, 1843.

The Autumn Exhibition of the Fourth Riding of York Agricultural Society took place at Newmarket, on the 5th day of October. The weather was remarkably favorable, and the day was well improved by the friends of Agriculture in Newmarket and its vicinity.

The show of Animals, Vegetables and domestic Manufactures was very creditable to the Society and its supporters, these being entered for exhibition—22 Head of Horned Cattle; 28 Head of Horses; 41 of Sheep; 12 of Hogs; 9 Samples of Grain and Grass Seeds; 18 lots of Roots; and 8 lots of Butter, Cheese, and domestic Cloth.

The following is a list of the successful competitors, and of the Premiums awarded to each:

HORNED CATTLE.

One Pair Fat Cattle—1st. prize. Wm. Simpson; Newmarket; 2nd. None.

Bull, Aged—1st. Thomas Cosford, King; 2nd. Disqualified.

One Milch Cow—1st. Col. Carthew, Whitchurch; 2nd. Thos. Mairs, Vespia.

Bull Calf—1st. George Playter, Whitchurch; 2nd. Nathaniel Pearson, Esq. King.

Heifer Calf—1st. Matthew Currey, Gwillimbury East; 2nd. Joseph Biscoe, Gwillimbury East.

HORSES.

Draught Stallion—1st. prize. M. P. Empey, Esq. Newmarket; 2nd. Geo. Simpson, Whitchurch.

Saddle Stallion—1st. J. Pearson, Whitchurch; 2nd. Samuel Lundy, Whitchurch.

Brood Mare—1st. Hon. R. Irving, Gwillimbury West; 2nd. Wm. Nelson, Gwillimbury East.

Mare Colt Yearling—1st. Hon. R. Irving, Gwillimbury West; 2nd. Joseph Hartman, Whitchurch.

Spring Foal—1st. A. Graham, Whitchurch; 2nd. Wm. Nelson, Gwillimbury East.

SHEEP.

Ram, Aged—1st. Geo. Simpson, Whitchurch; 2nd. Thomas Mair, Vespia.

Three Ewes—1st. Geo. Simpson, Whitchurch; 2nd. George Simpson, Whitchurch.

Three Fat Wethers—1st. James Pearson, Esq. Whitchurch; 2nd. James Pearson, Esq. Whitchurch.

Ram Lamb—1st. M. Currey, Gwillimbury East; 2nd. M. Currey, Gwillimbury East.

Three Ewe Lambs—1st. Geo. Simpson, Whitchurch; 2nd. James Pearson, Esq. Whitchurch.

SWINE.

Boar, Aged—1st. Unworthy.

Brood Sow—1st. George Playter, Whitchurch; 2nd. M. Currey, Gwillimbury East.

Boar Pig—1st. Levi Heacock, Whitchurch; 2nd. Nathaniel Pearson, Esq. King.

Sow Pig—1st. Jos. Hartman, Whitchurch; 2nd. Nathaniel Pearson, Esq. Whitchurch.

GRAIN AND GRASS SEEDS.

Winter Wheat—Unworthy the first; 2d. Wm. Simpson, Newmarket.

Spring Wheat—1st. Joseph Hartman, Whitchurch; 2nd. Thomas Currey, Gwillimbury East.

Peas—1st. Adam Graham, Whitchurch; 2nd. John Clubine, Whitchurch.

Flourer Seed—None shown.

Timothy Seed—1st. Levi Heacock, Whitchurch; 2nd. Joseph Hartman, Whitchurch.

ROOTS AND GARDEN VEGETABLES.

Potatoes—1st. Samuel Lundy, Whitchurch; 2nd. Hon. Æmilius Irving, Gwillimbury West.

Carrots—1st. Adam Graham, Whitchurch; 2d. Philip Lyne, Newmarket.

Onions—1st. Adam Graham, Whitchurch; 2d. Thomas Garbutt, Newmarket.

Beets—1st. Samuel Lundy, Whitchurch; 2d. none.

Mangel Wurzel—1st. Thomas Garbutt, Newmarket; 2d. None.

Ruta Baga—1st. Thos. Currey, Gwillimbury East; 2d. Orrin Ford, Gwillimbury East.

Pumpkins—1st. Thomas Currey, Gwillimbury East; 2nd. Nathaniel Pearson, Esquire, King.

Cabbages—1st. Samuel Lundy, Whitchurch; 2d. P. Lyne, Newmarket.

DOMESTIC MANUFACTURES.

10 lbs *Cheese*—1st prize, Orrin Ford, Gwillimbury East; 2d. None.

10 lbs *Butter*—1st. Thomas Currey, Gwillimbury East; 2d. Joseph Hartman, Whitchurch.

3 pairs *Stocks*—1st. George Playter, Whitchurch; 2d. None.

10 yds *Cloth*—Unworthy the first; 2d. Thos. Currey, Gwillimbury East.

The business of the Show being concluded, the members of the Society, with their friends, sat down to a substantial dinner, prepared by Mr. A. McKinlay, of the Newmarket Inn. After the removal of the cloth, the Treasurer, Mr P Empey, Esq., announced the successful competitors, and read a communication from the President, the Hon. Æmilius Irving, which was received with much applause.

Having concluded the business of the day, the company separated, at an early hour, apparently well pleased with the proceedings of the Show, and resolved to be unremitting in their efforts for the promotion of the great science of Agriculture.

Your's respectfully,
JOSEPH HARTMAN, Secretary.

COPY of the Letter of the Hon. J. ÆMILIUS IRVING, to the Agricultural Society of the Fourth Riding of York.

TO THE FOURTH RIDING OF YORK AGRICULTURAL SOCIETY.

GENTLEMEN,—I request you will entertain my regret at being unable to attend the Agricultural and Cattle Show of our Society, on the 5th proximo. I feel confident you will readily admit that the cause of my absence, attending to my duties (as a Member of the Honourable the Legislative Council), is a sufficient reason for it, and that nothing short of the high sense I entertain of the propriety of attending to my Parliamentary duties would keep me from personally discharging those of President of the Fourth Riding of York Agricultural Society.

I must, therefore, under the circumstances, express my sincere good wishes for the success of our Society, and your merry meeting, by an epistolary communication.

I trust many, who, I am sorry to say, have been insensible to the advantages of such Societies, will arouse from their lethargy, and contribute, not only by subscribing, but by their presence and personal exertions in support of the all-important science of Agriculture. When I look abroad, and see so many Agricultural Societies prosperous, numbering a

great many subscribers, I contrast our comparatively few but zealous supporters of the Fourth Riding of York Agricultural Society, with feelings of high respect and approbation, for their persevering and public spirit, in adhering to it under discouraging circumstances that I trust can never again arise or impede its prosperity. It is astonishing that in so prosperous and wealthy a section of country, as the Fourth Riding of York, we cannot boast as numerous a list of members as that of any other similarly constituted and circumstanced a Society.

Farmers should, above all people, cultivate a friendly and frequent intercourse with each other, by which they will mutually derive advantages, (or must otherwise be deprived of) by comparing the different practice and system of farming of each other, and by noticing the various results and success in proportionate degrees, or failure; much mutual advantage would be derived by the individuals, and the community generally benefitted.

I trust the praiseworthy and laudable exertions of the Society, to increase the list of members, will be crowned with every success.

I remain, Gentlemen, with all those feelings of regard and respect towards you, that you are so fully entitled to, for your uniform and invariable kindness and consideration towards me,
Your most obedient humble Servant,
J. ÆMILIUS IRVING,

President.

Kingston, September 29, 1843.

HINTS TO FARMERS.

Great profits in agriculture can result only from great improvements of the soil.

Great improvements of the soil can result only from unremitting industry. The chief study of every farmer should be what is useful, and what is useless expense, in relation to his art. The discrimination between these is the master key of the farmer's prosperity. The first should be incurred with a freedom little short of profusion. The last should be shunned, as the sailor shuns the rocks, where are seen the wreck of the hopes of preceding mariners.

Liberality in providing utensils, is the saving of both time and labor. The more perfect his instruments, the more profitable are they. So also is it with his working cattle and his stock. The most perfect in their kinds are ever the most profitable.

Liberality, in good barns and warm shelters, is the source of health, strength and comfort to animals; causes them to thrive on less food, and secures from damage all sorts of crops.

Liberality also, in the provision of food for domestic animals, is the source of flesh, muscle and manure.

Liberality to the earth, in seed, culture and compost, is the source of its bounty.

Thus it is in agriculture, as in every part of creation, a wise and Paternal Providence has inseparably connected our duty with our happiness.

In cultivating the earth, the condition of man's success is his industry upon it.

In raising domestic animals, the condition of his success is, kindness and benevolence to them.

In making the productiveness of the earth, depend upon the diligence and wisdom of the cultivator, the Universal Father has inseparably connected the fertility of his creation with the strongest intellectual inducements and the highest moral motives.

In putting the brutal world under his dominion, he has placed the happiness of which their nature is susceptible, under the strong guarantee of man's interest.

Instead, therefore, of repining at his lot, let the cultivator of the ground consider his, as among the highest and happiest of all human destinies, since in relation to the earth he is the instrument of Heaven's bounty; and in relation to the inferior orders of creation, the almoner of Providence.

(From the Central New-York Farmer.)

SONG.

TUNE—"Auld Lang Syne."

Ye farmers, raise your standard high,
With one united force;
Let Onward! Onward! be your cry,
Though toilsome be your course.

Your wealth shall spring from hill and dale—
From mountain side and plain;
From bleating flocks, and lowing herds,
From fields of waving grain.

Continue then to plough the soil,
Rich treasures you shall find;
Each day shall bring content and peace,
Health, and a cheerful mind.

To you belong the boon, the power,
To guard our liberty;
To strengthen, in a trying hour,
The bulwarks of the free.

Bright science on your path shall shine—
Truth shed her mildest ray;
And joy and hope, and love divine,
Lead on to endless day. IDA.

Rivulet Valley.

To the Editors of the Central N. Y. Farmer.

HOME EDUCATION OF DAUGHTERS.

Gentlemen.—There is a subject which might, perhaps, with propriety, find a place in your Journal, if some able pen could take it up, and treat it according to its importance. The subject to which I allude, is the HOME EDUCATION OF DAUGHTERS.

Where, but at home, are nurtured and expanded all the finer feelings of our nature, all the sympathies of the heart. The daughter in relieving the mother of passing and indispensable cares, of administering to the wants of father, brother, or sister, enjoys infinitely more heartfelt satisfaction, than she could in displaying her attainments, (be they ever so numerous,) in what are styled the more polite accomplishments.

The aim of education seems to be, to fit each of us to fill with ability and propriety, our individual station in life. A correct home education, must therefore, be regarded as the corner-stone of all that is truly desirable, excellent, or beautiful, in female accomplishments. What though the superstructure be ever so beautiful and elegant, even so symmetrical and tasty, yet if the foundation be deficient, where is the worth of the edifice? Who would repose in it with trust and security.

The American mother should, above all others, feel the importance of training her daughters to habits of domestic industry, to the cares and duties of real life, which tend to call forth the enterprise and energies of their natures, which qualify for usefulness, rather than to shine and dazzle. Let the useful, the agreeable, and ornamental, be made to harmonize. Our daughters should be taught to feel, that a practical acquaintance with domestic labor, is as indispensable to their thorough education, as the knowledge of music, drawing, or the languages, and that to understand plain needle-work, is much more requisite, than skill in embroidery. There is time enough, if introduced advantageously from infancy to maturity, to learn all these things. While a practical knowledge of every branch of household economy detracts nothing from her accomplishments, it adds a pleasing lustre to her character.

If, now, I have said enough to provoke some competent person to take up this subject, you will again be troubled with communications from

IDA.

FINDING A WIFE.

To the man of sense and reflection, the choice of a matrimonial partner is no easy matter. Ball-room matches he considers dangerous; if he be a metropolitan he hardly dare take to himself a city wife, for he thinks with Knowles, that "if you would have a maid live in town, breed her out in the country." He will not marry one above his station, lest his wife look down upon him, nor below it, because he cannot afford to do so. It is too often the case that the family of a poor girl look to her getting "well married" as a desideratum not only for herself, but for them. In such a case the union is a marriage to a whole family.

If he desires a spouse who can work, he will not take one who has not been used to it, and, again, he will avoid choosing one who has toiled all her days, lest she should follow the example of others, who, to the confusion of their husbands, make married life one long "resting spell."

Innumerable are the methods used in wife-hunting, and not a few timid riders spend a whole lifetime in avouing the ditches and dangers, while others more bold dash on, regardless of consequences, and are repaid with success or ruin, whichever blind fortune wills.

We know an honest and respectable grocer who is married to a thrifty and good woman. He first saw the girl (now his wife) at a Savings Bank, which he had attended some days under the impression that any female so prudent as to save up some money in such an institution, must also have neatness and common sense enough to become a good wife.

He found a girl that suited him, though she was neither handsome nor accomplished, and he married her. Yet he never consulted her bank book, he was not mercenary: the mere fact that she did not spend for dress all her wages, but saved something, was to him sufficient recommendation. He has not been disappointed in his choice, and he confidently advises those in want of wives to go occasionally into the Savings Bank.

SUGGESTIONS TO PARENTS.

Children should never be allowed to dictate to their parents, nor contradict them, but they may inquire whether it is not so and so, or whether such a way would not be preferable? As to their reading, such books as combine entertainment and instruction are to be chosen rather than those which are merely fictitious and romances. Books of immoral tendency they ought not to peruse. Whatever other good books they peruse, the Bible should be their daily companion. They should be brought up to pay strict regard to the Sabbath, and to attend to the worship with seriousness and close attention to what they hear. They should be frequently reminded of their dependence on God, and of his all-surrounding presence,—of their accountability to him, and of the uncertainty of life, as also the importance of being ready to meet death. They should be taught the way to a throne of grace, and the duty and privilege of coming to it day by day, with an humble and believing heart. The value of time should be deeply impressed upon their minds, and they should learn to improve it all to some good purpose. I would only add that parents should pray with and for their children, that God would sanctify them, keep them from evil, and guide them in the paths of truth and peace, for His name's sake.

FATHER.—It is said that the last words of the venerable Dr. Noah Webster were as follows: "I know in whom I have believed—and I have believed—and I depart without one fear or one wavering doubt."

HOW TO CHOOSE A WIFE.

The *Patriarch*, a magazine just published, offers the following receipt for the selection of a wife:

"A place for every thing, and every thing in its place," said a patriarch to his daughter. "Select a wife, my son, who will never step over a broomstick." The son was obedient to the lesson. "Now," said he, pleasantly, one gay May day, to one of his companions, "I appoint this broomstick to choose me a wife. The young lady who will not step over it shall have the offer of my hand." They passed from a splendid saloon to the grove; some stumpled over the broomstick, and others jumped it. At length a young lady stooped and put it in its place. The promise was fulfilled. She became the wife of an educated and wealthy man, and he the husband of a prudent, industrious, and lovely wife. He brought a fortune to her, and she knew how to save one. It is not easy to decide which was under the greatest obligations.

THE ALPHABET OF REQUISITES FOR A WIFE.

A wife should be amiable, affectionate, affable, accomplished; beautiful, benign, benevolent; charming, candid, cheerful, complaisant, civil, constant; dutiful, dignified; elegant, easy, entertaining; faithful, fond, faultless, free, good, graceful, governable; handsome, harmless, healthy; intelligent, industrious, ingenious, just, kind; lively, lovely; modest, merciful, neat, obedient; pretty; righteous; submissive; temperate; virtuous; well-formed; and young. When I meet with a woman possessed of all these requisites, said an elderly bachelor, I will marry.

If I can, the "elderly bachelor" should have added.

YOUNG MEN.

One of the most favorable "signs of the times" is to be found in the desire which is beginning to be manifested by many young men of education and wealth to engage in agricultural pursuits instead of pressing into the already overfilled ranks of the mercantile and "learned" professions. The following extract is from a letter of a New York merchant, who had applied to us to aid him in finding a place for his two sons with an intelligent practical farmer, where they could qualify themselves to manage a farm to advantage. He says, and truly, that "it is desirable for the public good and for the progress of agricultural science, that young men of education and respectability should, in place of crowding into large cities to live under constant excitement, and to waste their lives in dreams of affluence, devote themselves to agriculture, the noblest of all occupations—in pursuing which they may live in tranquil enjoyment—cultivating the intellectual and immortal spirit. This would raise up a class of well-informed farmers—the true nobility of the country."—*Albany Cultivator.*

RULES OF CONDUCT.

Adhere most scrupulously to truth, and labor to preserve the strictest integrity, simplicity, and sincerity.

Strive to be as kind, forbearing, and forgiving, as you can, both to friends and foes.

Never speak evil of any one, on any pretence whatever.

Strive to recommend religion by the courtesy, civility, and condescending character of your conduct.

Mortify lusts, sensuality, and sloth.
Shut out evil imaginations and angry thoughts.

A FARMER PENNYWISE AND FARMER POUNDWISE.

There is a farmer Pennywise, with whom I am acquainted, will occasionally raise a good heifer, steer or colt, for his neighbor's keep good breeds, and he by accident will be occasionally benefited thereby. When he has such an animal in his flock, he is apparently uneasy until it is disposed of; and after selling such an animal, a heifer, for instance, if you follow him into the house you may hear something like the following:—"Well, my dear, I have sold the big heifer for fifteen dollars: is not that a good price for a heifer of her age?" "Good price indeed," his wife would reply, "you had better have sold two of them little cat-ham'd, crooked-legged, scrawny things that you always keep for cows. The reason that our cattle look so bad, and that we sell so little butter and cheese is, that you will sell the best heifers." Poor woman! I pity her; her pride and ambition are injured, and her children and self in rags, because her native industry and economy are cramped by the foolish and niggardly policy of her husband.

The picture is reversed in farmer Poundwise, who always keeps his best animals until full grown; then selecting his best breeders for his own use, and selling the rest. If he has a good young horse, he will say that he will make a fine team horse; a mare, she will make a good bred mare. "And what will you do with that?" says his neighbour, pointing to an ordinary animal.—"Between you and I," says he, "I shall sell that colt the first chance. Such an animal spoils the looks of the rest, and will not pay for keeping." Thus he will sell his poor steers, heifers, sheep and pigs at the first offer. If not sold, he would fatten those that would pay the expense, and give away those that would not. Not pay the expense of fattening! Are there any cattle, sheep, or hogs, that will not pay the expense of fattening? Reader, take some of each; of the real Pharaoh breed, feed them until fat, keep an account of the expense, and you can answer this question yourself. In this way farmer Poundwise always has valuable stock; his steers are ready sale and command a good price; his horses are the best in the neighbourhood, and the first to be looked at by purchasers. So with all the animals that he raises. Pennywise, on the contrary, is thronged with an ill-shaped, worthless stock that none will buy and pay the expense of raising; which are continually eating out his substance and making no return. Thus Pennywise drags on a miserable life in the road to ruin, while Poundwise moves easily and happily along in the road to wealth.—*Maine Cultivator.*

FEMALE EDUCATION.

Females ought to receive a substantial common school education, after which, those who evince a genius for any of the fine arts, and their own taste and parents means would allow, it would certainly be commendable to indulge them in it; but this by no means to be allowed to interfere with the study of mere useful branches.

The branch of education most useful for a woman is, housewifery; the best means of infantile instruction, and the care of infants in their infancy.

Respecting housewifery, she ought to be taught in all its various branches, not omitting the most common of a well ordered family. When the pupil has so full an opulent situation, a knowledge of those branches will enable her effectually to superintend the affairs of her household, and prevent her from being the dupes of her hirelings; and will therefore be at service at times of the greatest prosperity. But should adversity overtake her, (and in this country, and in these times, none are beyond its reach,) this part of the education, despised by many as it is, may be the means of saving herself and her family from destruction.

FORMATION OF HABITS.

Success in life depends, in a great measure, on the early formation of our habits.—Whether our grand object be wealth or fame, or that nobler one, exalted virtue, we must shape our habits or we shall fail.—What enabled Franklin to obtain the highest honors of philosophic fame; to stand, as he expressed it, "before kings," and what is better, to live in the memory of his countrymen? The early formation of good habits. The perusal of his autobiography, no young man should omit, will show what those habits were. What made Girard the richest citizen of our country, and the benefactor of his race? The formation of early habits of frugality, disinterestedness and self-denial. Such habits are not formed in a day, nor will they result from a few faint resolutions. They are the result of continued effort.

Whatever is of value must, in most cases, be sedulously pursued. Seldom can it be caught in a moment, like a prize in the lottery, or brought to perfection like a mushroom in a few hours. Character most certainly is of slow growth. No method can force it, or hasten its ripening; like asparagus, so treated, it is sickly and without flavor. Only by long continuance, and unvaried, uninterrupted care, can this jewel be obtained, polished and set, so as to show itself to the best advantage. Not by accident, nor by fits and starts, but by regular, judicious and permanent habits, may a youth hope to obtain this important qualification, character.

Habit is either an insidious enemy, or a firm friend. We had need be much on our guard concerning its influence; rather let us enlist it and employ it judiciously; it will render us much assistance in forming a character useful, estimable and efficient.—*Buel.*

THINGS THAT HAVE BEEN SEEN.

A writer in the *Prairie Farmer* has seen some curious things. We select the following:

I have seen farmers that went to the store oftener than they went to mill.

I have seen a farmer's wife take the last twenty bushels of wheat from the granary to purchase a new dress, when her husband at the same time had an execution standing against him.

I have seen farmers that could go twenty miles to a political meeting, but would not go five to an agricultural one.

I have seen farmers that had but little except "dog fence," but I could not see that they had better crops than those that had good rail or board fence.

I have seen farmers that burned their straw when threshing their grain in the fall, and go begging the same article before spring to keep their stock alive.

I have seen a farmer that travelled one hundred and four miles in the course of a year to use his neighbour's grindstone, when two days' labour would purchase one that would last ten years.

I have seen young men that could pay ten dollars for a "spruce," that would not pay one dollar for the *Prairie Farmer*.

I have seen a mother that called her child a "brat" in the cradle, and in two years the child called her a harder name.

I have seen farmers that would carry their produce fifty miles to market, when they could sell it at their own doors for the same price.

I have seen many farmers that would drink slough water and have the ague six months, when four days labour would dig a good well.

I have seen farmers' daughters that were "very accomplished" in everything except carding, spinning, weaving, knitting, churning, making cheese, cooking, &c.

"MOTHER CHANGES HER MIND."

Perhaps in no way do mothers more effectually destroy their own influence with children and injure them, than from neglecting to practice decision. The following little fact will illustrate the pernicious influence of this course of conduct:

A little girl remarked, a short time since, that beaver hats were quite fashionable, and that she would have one. "Have you forgotten," said I, "that your mother, yesterday remarked, that the hat you wore last winter, is quite neat, and that she did not intend to encourage extravagance, and love of fashion in a little girl." "Ah well," replied she, "no matter for that—mother said that your Susan should not go to Miss W's party the other evening, because she was very much afraid there would be dancing there; but when sister cried out about it and made a fuss, mother consented to let her go, and bought her a new pair of shoes and a pretty blue scarf to wear. Besides, I am sure it is quite right to wish to have a fashionable hat to go to church in, and I'll tease mother to buy me one. And I know I shall get it—for mother often changes her mind."

FRANKLIN'S WIFE.

On the repeal of "that mother of mischief," the stamp act, Dr Franklin, in 1776, sent over from London to his wife, who was then living in Philadelphia, a new dress, &c. In his letter he says:

"As the stamp act is at length repealed, I am willing you should have a new gown which you may suppose I did not send sooner, as I knew you would not like to be finer than your neighbours, unless in a gown of your own spinning. Had the trade between the two countries totally ceased, it was a comfort for me to recollect that I had once been clothed from head to foot in woolen and linen of my wife's manufacture; that I never was prouder of any dress in my life, and that she and her daughter might do it again, if necessary."

FORGIVENESS.

The brave only know how to forgive; it is the most refined and generous pitch of virtue human nature can arrive at. Cowards have done good and kind actions—cowards have even fought, nay, sometimes conquered; but a coward never forgave: it is not his nature; the power of doing it flows only from a strength and greatness of soul conscious of its own force and security, and above all the little temptations of resenting every fruitless attempt to interrupt its happiness.

NEWSPAPERS.

A newspaper is a school in a family, worth ten dollars a year. Even the most barren paper brings something new. Children read and hear the contents, gain intelligence of the affairs of the world, and acquire useful knowledge, of more importance to them in life than a present of fifty acres of land. Parents are not aware of the vast importance of a newspaper in a family of children. We have the remark before us, and we repeat it, that take two families of children equally smart, and both going to the same school—let one of them have the free use of a newspaper, and it would excite astonishment to mark the difference between them. Full one half, and an important half of education, as it respects the business of the world, and the ability to rise and make one's self respectable in it, is derived from newspapers. What parent would not wish his children respectable? Who would be willing to have his neighbor's children more intelligent than his own? Yet how trifling is the sum a paper costs! It is even in these hard times absolutely contemptible in amount, and no man ever felt it, except in its beneficial consequences, who paid the subscription regularly once a year.

RELIGIOUS EDUCATION.

Do not press your children too much during their early years on the subject of religion. Show them, by your example, that it is the object of your reverence, but suffer their religious principles to form gradually, as their understandings open. Do not make religion appear a burden to them; do not let them see religion clothed in a dress repulsive to their youthful minds. To insure its making a good impression on them, let it be clothed in its native colours of attraction. Study to make them regard it as an object of veneration, but, at the same time, what it truly is, as a source of cheerfulness and joy. Do not let them regard the Sabbath a day of gloom and restraint. Take them with you to the house of God, and accustom them to regard the institutions of religion with reverence, do not compel them, during the rest of the day, to remain within the walls of your house. Allow them the reasonable indulgence of air and exercise—an indulgence useful to their health, rational in itself, and no way inconsistent with their religious character, while the refusal of that indulgence has just the effect of making them regard the return of that day as a day of penance and mortification, instead of hailing it as a day of joy.

HOME DISTRICT AGRICULTURAL SOCIETY.

The following is a List of Prizes and Premiums distributed at the *Autumn Fair and Cattle Show*, held in this City, on Wednesday, the 11th October, 1843:—

SHEEP AND FAT CATTLE.

- Judges of Sheep and Fat Cattle*—Rob't Barnes, William Mason, John Clarke.
- RAM LAMBS.**—James Taylor, 15s.; John Cade, 10s.; George Miller, 5s.
- RAM, One Year.**—William Miller, 30s.; William Miller, 20s.; John Cade, 10s.
- RAM, Two Years.**—John Cade, 30s.; Aaron Baker, 20s.; William Miller, 10s.
- RAM, Aged.**—Aaron Baker, 30s.; John Cade, 20s.; J. P. Wheeler, 10s.
- EWES LAMBS.**—George Miller, 15s.; James Taylor, 10s.
- EWES.**—William Miller, 30s.; Geo. Miller, 20s.; George Miller, 10s.
- FAT CATTLE.**—Thomas Nightingale, 40s.; Jon's Dand, 30s.; Watson & Parker, 10s.
- FAT SHEEP.**—Thomas Nightingale, 30s.; George Miller, 20s.; Thomas Nightingale, 15s.

WHEAT.

- Judges*—John Ritson, and James G. Worts.
- WHITE WHEAT.**—Joseph Price, 15s.; John Moore, 10s.; Elias Snider, 5s.
- RED WHEAT.**—Elias Snider, 15s.; William Moore, 10s.
- SPRING WHEAT.**—Elias Snider, 15s.

CATTLE AND PIGS.

- Judges*—William Armstrong, John Darling, and Alexander Gibb.
- BOARS.**—W. Jackson, 30s.; Henry Johnson, 20s.; George Miller, 15s.
- SOWS.**—John Baker, 30s.; John Sovereign, 20s.; Henry Johnson, 15s.
- SPRING BULL.**—Hugh Thomson, 20s.
- SPRING HEIFER.**—John Miller, 20s.
- HEIFERS.**—N. Davis, 20s.; Thomas Mair, 15s.; Thomas Mair, 10s.

HOPS.

- Judges*—W. Aides, Joseph B.oor, Edw. Wheeler.
- HOPS.**—Reuben Case, 50s.; Samuel Conover, 40s.; James Case, 20s.

HORSES.

- Judges*—John Gibbank, T. B. Bishop, F. Dolby.
- COLT, or FILLI.**—James Taylor, 20s.; N. Kirby, 15s.; William Whiteoak, 10s.

HORSE, or MARE, under Two.—R. Armstrong, 30s.; W. Armstrong, 20s.; A. Glindinning, 10s.

Horse, under Three.—James Powell, 30s.; W. B. Heward, 20s.; W. Moore, 10s.

Mr. George Ritson, who produced for sale the largest quantity of Hops, grown and prepared by himself during the present year, £5.

TORONTO, MARKETS.

October 30, 1843.

Flour	per bbl.	196 lb.	17	6	a	21	3
Wheat	per bush.	60 lb.	3	3	a	4	0
Barley	per bush.	48 lb.	1	9	a	2	2
Rye	per bush.	56 lb.	2	3	a	3	0
Oats	per bush.	34 lb.	1	0	a	1	2
Oatmeal	per bbl.	196 lb.	15	0	a	18	9
Peas	per bush.	60 lb.	1	6	a	2	0
Timothy	per bush.	60 lb.	3	0	a	3	9
Potatoes	per bushel		1	0	a	1	6
Hay	per ton		40	0	a	50	0
Straw	per ton		20	0	a	25	0
Hides	per 100 lb.		20	0	a	0	0
Salt	per barrel		12	6	a	15	0
Beef	per 100 lbs.		10	0	a	15	0
Beef	per lb.		0	2	a	0	4
Mutton	per lb.		0	2	a	0	4
Veal	per lb.		0	2	a	0	4
Pork	per 100 lbs.		15	0	a	17	6
Pork	per lb.		0	2	a	0	4
Turkeys	each		2	6	a	3	6
Geese	each		1	6	a	2	6
Ducks	per couple		1	8	a	2	0
Fowls	per couple		1	3	a	1	8
Chickens	per couple		0	10	a	1	3
Butter	per lb.		0	6	a	0	7 1/2
Eggs	per dozen		0	6	a	0	7

NURSERY AND SEED STORE.

THE SUBSCRIBER feels grateful for the patronage extended to him since he commenced business, and would respectfully inform his friends and the public, that he has removed from King Street to Yonge Street, immediately opposite the Stores of ROSS MITCHELL & Co., where he will carry on the business of NURSERY and SEEDSMAN. Having twenty Acres in the liberties of the city, in course of breaking in, as a Nursery and Seed Garden, he can now supply the public with Fruit and Ornamental Trees, Shrubs, Roses, Herbaceous Flowering Plants, &c., at a cheaper rate than they can be got from New-York or Rochester.

Trees and Seeds packed carefully to order, and sent to any part of the country.

GEO. LESSLIE.

Toronto, September, 1843.

CARDING MACHINES.

THE SUBSCRIBER begs leave to acquaint his friends and the public in general, that in addition to his Foundry and French Burr Mill Stone Factory, he has engaged Archelaus Tupper, who is an experienced Mechanist, to make all kinds of CARDING MACHINES, of the latest and most approved construction, he has been engaged for twenty years in the United States, and also in Canada, and has a thorough knowledge of all kinds of Machinery, namely:—Double and Single Carding Machines, Pickets, Condensers, Jacks, Bitleys and Jinney. Also, Broad and Narrow Looms, Shearing Machines, and Gigs, Napping and Teazling, Stoves for heating Press Plates; Press Screws. Also, Grinding, Shearing, Machine Blades; Fulling Mill Cranks, &c., and all kinds of Grist and Saw Mill Castings made to order; Wrought and Cast Iron Cooking and Plate Stoves; Fancy Stoves of all kinds: Also, Ploughs of different patterns; Mill Screws of all kinds; and Damsel Irons; Bolting Cloths, of the best Dutch Anker Brand, warranted of the best quality, Mill Stones of all sizes, always on hand and to order. Also, all the other herein-mentioned articles always on hand and for sale by the Subscriber, at his Foundry, on Yonge Street, as cheap as they can be obtained at any other place.

CHRISTOPHER ELLIOT.

Toronto, August 7, 1843.

P. L. SIMMONDS.

Agricultural Agent & Commission Merchant, 18 Cornhill, London, England.

SUPPLIES to order, Stock, Seeds, Implements, &c., and undertakes the Sale of Consignments of Goods. See his Advertisements in any of the leading papers of Canada East and West. September, 1843.

TRAVELLING AGENTS WANTED.

THE EDITOR OF THE BRITISH AMERICAN CULTIVATOR is desirous of procuring the services of several competent persons to canvass the Province in the capacity of TRAVELLING AGENTS for that Journal. Note need make application but those who can give unquestionable references.

A very liberal rate of discount will be given. August, 1843.

ROPE AND TWINE MAKER.

THE SUBSCRIBER begs to acquaint the Farmers of the Home District, that he has commenced the business of ROPE and TWINE MAKING, on Yonge Street, near No. 1 Toll-gate, where he has constantly on hand Rope and Twine, and purposes to make to order.

CASH paid for Flax, Hemp, and Horse-hair.

E. BENBOW.

No. 1 Toll-Gate.

Yonge Street, Toronto, Sept., 1843.

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