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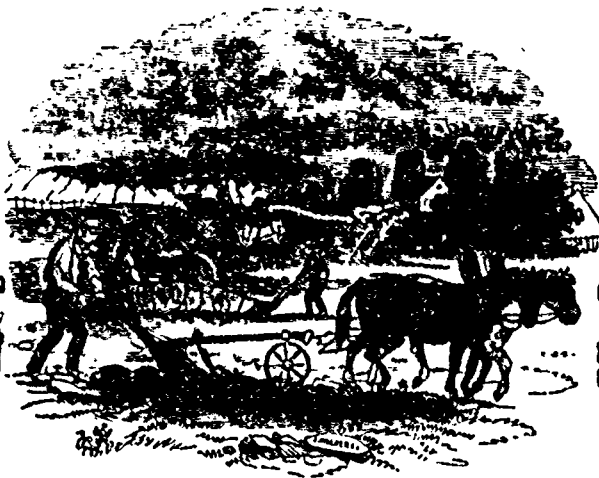
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## NOVEMBER'S BLAST.

"THE FLOWERS ARE GONE."

The melancholy days are come,  
The saddest of the year,  
Of wailing wind and naked woods,  
And meadows brown and sere.  
Heap'd in the hollows of the grove,  
The summer leaves lie dead,  
They rustle to the eddying wind,  
And to the rabbit's tread.  
The robin and the wren are flown,  
And from the shrubs the jay;  
And from the wood-top caws the crow,  
Through all the gloomy day.

Where are the flowers, the bright young  
flowers,  
That smil'd beneath the feet,  
Of hues so passing beautiful,  
And breath so passing sweet?  
Alas! they all are in their graves,  
The gentle race of flowers  
Are lying in their lowly beds.  
With the fair and good of ours.  
The rain is falling on the graves,  
But the cold November rain  
Calls not, from out the gloomy earth,  
The lovely ones again.

The wind-flower and the violet,  
They perished long ago;  
The briar, the orchid, and the rose,  
Died 'mid the summer's glow;  
But on the hill the golden-rod,  
The aster in the wood,  
The yellow sunflower by the brook,  
In autumn beauty stood:  
Till fell the frost from the clear cold heaven  
As falls the plume on men,  
And the blossom never smiled again,  
By upland, glade, or glen.

And now, when comes the calm mid-day—  
As still such days will come—  
To call the squirrel and the bee  
From out their winter home;  
When the sound of dropping nuts is heard,  
Though all the trees are still,  
And twinkle, in the smoky light,  
The waters of the rill:  
The south wind searches for the flowers  
Whose fragrance late he bore,  
And sighs to find them in the wood,  
And by the stream, no more.

I then think of a loved one, who  
In youthful beauty died;  
The fair meek blossom that grew up  
And faded by my side;

We laid her in the cold moist earth,  
When the forest cast the leaf,  
And wept that such a lovely one  
Should have a life so brief.  
Yet not unmeet it was that one  
Like that young friend of ours,  
So gentle and so beautiful,  
Should perish with the flowers.

## PRELIMINARY POINTS TO BE CONSIDERED, BEFORE A FARMER, CAN UNDERTAKE WITH PRUDENCE, THE OCCUPATION OF ANY EXTENT OF LAND.

## SECT. II.—Soil. (Continued from page 3.)

The surface, or outward coating of land, usually consists of a collection of various earthy matters, in a loose and porous state, with a mixture of animal and vegetable substances, partially decomposed, together with certain saline and mineral ingredients. Where favourably combined, it is admirably calculated to afford support to plants, to enable them to fix their roots, and gradually to derive nourishment by their tubes, from the soluble and dissolved substances contained in the soil, (as this mixed mass is called), or passing into it. The strata on which it is incumbent, are known under the general name of *subsoil*.

The importance of the soil has been described in various ways. By some it has been called the mother, or nurse of vegetation. By others it is represented as discharging functions to plants, similar to those which the stomach does to animals in preparing their food, and fitting it for absorption by their roots. It furnishes the plant also with heat; for a well cultivated and highly manured soil, is much warmer than the surrounding atmosphere. The farmer, it is said, ought to study the relative value of the different soils, as a merchant does the worth of the several commodities he deals in. Good soils, it has been remarked, will seldom yield a scanty produce. In short, a favourable soil and climate, are deservedly accounted, "*The first riches of a country*."

The necessity of paying attention to the nature and quality of the soil, need not therefore be dwelt upon. By ascertaining the qualities it possesses, or by removing its defects, the profits of a farmer may be greatly increased. He must, in general, regulate his measures accordingly, in regard to the rent he is to offer,—the capital he is to lay out,—the stock he is to keep,—the crops

he is to raise,—and the improvements he is to make. Indeed, such is the importance of the soil, and the necessity of adapting his system to its peculiar properties, that no general system of cultivation can be laid down, unless all the circumstances regarding the nature, and situation of the soil and subsoil, be known; and such is the force of habit, that it rarely happens, if a farmer has been long accustomed to one species of soil, he will be equally successful in the management of another\*.

From inattention to the nature of soils, many foolish, fruitless, and expensive attempts have been made to introduce different kinds of plants, not at all suited to them; and manures have often been improperly applied. This ignorance has likewise prevented many from employing the means of improvement, though the expense was trifling, and within their reach. From ignorance, also, of the means calculated for the proper cultivation of the different soils, many unsuccessful and pernicious practices have been adopted.

Soils may be considered under the following general heads:—Sand;—Gravel;—Clay;—Peat;—Alluvial; and, Loam, or that species of artificial soil, into which the others are generally brought, by the effects of manure, and of earthy applications, in the course of long cultivation. While describing each sort, we shall briefly state the modes of improving their texture;—the crops for which they are respectively calculated;—and the districts where they are cultivated with the greatest success.

1. *Sand*.—A soil that consists entirely of small grains of a hard nature, (*silex*), which neither cohere together, nor are softened by water, nor soluble in acids, though it ought not to be totally abandoned, yet is too poor to be cultivated with advantage. It would indeed be hazardous in the extreme, from the risk of having the covering soil blown off the new-sown grain, in the spring, by high winds. Sandy soils, however, gene-

\* One of the most intelligent farmers in Norfolk, accustomed to a dry and sandy soil, was asked, What he would do with a wet or clayey one? He very candidly answered, "That he knew no more how to manage such a soil, than if he had never seen a plough." Farmers, when they change their situations, are too apt to carry along with them, that plan of management to which they have been accustomed, without considering that it may not suit their new situations.

rally have a considerable mixture of other substances, by which their quality is greatly ameliorated.

The best mode of improving the texture of such a soil, deficient in retentive or adhesive properties, is, by a mixture of clay, marl, warp, (the sediment of navigable rivers), sea-ooze, sea-shells, peat, or vegetable earth; and it frequently happens, that under the sand itself, or in its immediate neighbourhood, the materials may be found which are requisite for its improvements. Even light sandy soils are thus rendered retentive of moisture and manure; and when judiciously treated, are considered to be more profitable, than the wheat lands in their neighbourhood.

In some parts of Norfolk, they have availed themselves of these auxiliaries, for improving a sandy soil, in an eminent degree; they have thus entirely changed the nature of the soil, and by the continuation of judicious management, have given a degree of fame to the husbandry of that district, far surpassing that of others naturally more fertile.

The improvement of a sandy soil is generally accomplished by fossil manures: but vegetable substances are likewise effectual. Top-dressings of peat and black muck have been tried for that purpose, and the experiments were attended, not only with immediate good effects, but with permanent benefit.

Though sandy soils are not naturally valuable, yet being easily cultivated, and well calculated for sheep, that most profitable species of stock, they are often farmed with considerable advantage.

Sandy soils, however, of a good quality, under a regular course of husbandry, are invaluable. They are easily worked, and at all seasons; they are cultivated at a moderate expense; are not so liable to injury from the vicissitudes of the weather; and in general they have a dry soundness, accompanied by moisture, which secures excellent crops even in the driest summers.

The crops raised on sandy soils are numerous, such as common turnips, potatoes, carrots—barley—rye—buckwheat—pease—Indian corn—clover—sainfoin, and other grasses. This species of soil, in general, has not strength enough for the production of Swedish turnips, beans, wheat, flax, or hemp, in any degree of perfection, without much improvement in its texture, the addition of great quantities of enriching manure, and the most skilful management.\*

When under a course of cultivation, it is a great advantage to sandy soils, either to fold sheep upon them, or to consume the crops of turnips upon the ground where they are raised. These practices, greatly contribute to the improvement of such soils; and they are thus enabled to produce luxuriant crops not only by the dung and urine thus deposited, but by the consolidation and firmness of texture which the treading of the sheep occasions. When cultivated, manure should be frequently applied, and the vegetable matter should be less decomposed or rotted, than on other soils. Some farmers

\* The best method of raising wheat on sandy lands is on a clover ley when the soil has got an artificial solidity of body, and is thereby rendered capable of sustaining this grain till it arrives at maturity.—*Brown's Treatise on Rural Affairs*, vol. i. p. 101. Wheat also may be successfully raised on sandy lands after turnips, eaten on the ground by sheep, which consolidates the soil.

likewise insert the putrescent manure they employ, at a considerable depth, (8, 10, or 12 inches), to prevent a too rapid decomposition.

The carrot husbandry, in the "Sandlings" of Suffolk, as they are called, is one of the most interesting objects to be met with in British agriculture. After detracting all expenses, the profit is considerable. Some prefer to fatten bullocks with them; while others, who have the advantage of water-carriage, think it most beneficial to send their carrots to the London market. Carrots are likewise an admirable preparation for other crops.

In Norfolk and Suffolk, it is found that poor sandy soils, not worth 5s. per acre for any other purpose, under sainfoin, will produce, after the first year, about two tons per acre, of excellent hay, for several years, with an after-grass, extremely valuable for weaning and keeping lambs. How much more beneficial, than any crops of grain that such soils usually yield!

The management of sandy land, according to the system adopted by the celebrated Duckett of Petersham and Esher, in Surrey, has been strongly recommended by an eminent author. It was founded on three principles: 1. Ploughing very deep, by which a due degree of moisture was preserved in his light land, and the crops were flourishing in seasons of drought, which destroyed those where the ploughing had been shallow;—2. Ploughing seldom, but effectually, by a trench plough, or what he called a ekim-coulter plough, with which he buried the weeds that grew on the surface: he has been known to put in several crops with only four ploughings; and,—3. Occasionally raising a crop of turnips the same season, after a crop of wheat, or of tares.

In the Pays de Waes in Flanders, sand is likewise cultivated to great perfection. The soil of that district, which was originally a barren white sand, by a slow, but sure process, has at last been converted into a moist fertile loam. The surface, to the depth of three or four inches, was at first alone cultivated, but the soil was gradually deepened, as it became progressively enriched; and now the ground, at the commencement of every rotation, is trenched by a shovel, (the soil being very loose), to the depth of from fifteen to eighteen inches, the exhausted surface is buried, and fresh earth brought up, enriched by the manure washed down into it, during the seven preceding years. It is then subjected to the following course of crops: 1. Potatoes; 2. Wheat, manured, sown in November; 3. Flax manured, and sown with clover-seed, for the next crop; 4. Clover; 5. Rye or wheat, Oats after the rye; and, 7. Buck-wheat; at the end of which period the ground is again trenched.

The double crops raised in the sandy soils of Flanders, in the course of the same year, are attended with much advantage. The Flemish farmers thus obtain a greater quantity of manure, than they could produce under any other system, and by this are enabled to extract so much produce from soils, which were originally sterile, and which would soon revert to their former state of barrenness, without the greatest industry, and the most unwearied attention.

In the management of sandy soils, three rules are to be observed: 1. Never to pick

† Suffolk Report, p. 125.

‡ Young's Calendar, p. 123.

off any small stones that may be found in them, as they answer many valuable purposes: they shelter the young stalk in bad weather; they preserve moisture, and prevent the crops from being burnt up by scorching heats; they hinder the evaporation of the enriching juices; and, by these means, greatly assist the progress of vegetation.\* 2. Frequently to renovate the strength of such soils, by laying them down with grass-seeds, and pasturing them for a few years, as they are so apt to be exhausted by aration, if corn crops are too frequently repeated; and, 3. When farm-yard dung is applied to this description of soil, always to give it in a state of compost, with a view of adding to the tenacity of the soil, and to prevent the manure from being dissipated in a dry season, or washed down by rain.

It may be added as a general maxim, that the fertility of sandy, or siliceous soils, is in proportion to the quantity of rain that falls, combined with the frequency of its recurrence. As a proof of this, in the rainy climate of Tunn, the most prolific soil has from 77 to 80 per cent. of siliceous earth, and from nine to fourteen of calcareous; whereas in the neighbourhood of Paris, where there is much less rain, the silex is only in the proportion of from 26 to 50 per cent. in the most fertile parts.

2. Gravel.—Gravelly soils differ materially from sandy, both in their texture, and modes of management. They are frequently composed of small soft stones, sometimes of stony ones; but they often contain granite, limestone, and other rocky substances, partially, but not very minutely decomposed. Gravel, being more porous than even sand, is generally a poor, and what is called, a hungry soil, more especially when the parts of which it consists, are hard in substance and rounded in form. Gravelly soils are easily exhausted, for the animal and vegetable matters they contain, not being thoroughly incorporated with the earthy constituent parts of the soil (which are seldom sufficiently abundant for that purpose), are more liable to be decomposed by the action of the atmosphere, and carried off by water.

Gravelly soils are improved by draining, where they are troubled with springs, though this rarely occurs;—by deep ploughing;—by mixing them with large quantities of clay, marl, peat, or other earth; by frequent returns of grass crops;—by repeated applications of manure;—and by irrigation, if the water be full of sediment, and judiciously applied.

Sometimes the ground is so covered with small stones, that hardly any mould is to be seen. Land of this description is very troublesome to work, and is injurious to the implements of husbandry employed in the cultivation; but with proper management, it can often be rendered highly productive. The stones on the surface, by sheltering and keeping warm, in the cold seasons, any small quantity of soil which is amongst them; and by protecting it from the scorching influence of the sun, in the hot season, frequently produce abundant crops.

\* Remark by Edward Burroughs, Esq. This of preserving stones, is by some extended rule beyond sandy soils, more especially in hot climates. Even in this country, stones are said to be of use in promoting the depth of thin soils; in rendering the texture of clays less compact, and less apt to subside, and where the soils are puffy, in collecting the shifting looseness of the materials.

The *stone-brash*, or *com-brash* soils, (as they are provincially called, of Gloucestershire, and the mulland counties of England, may be included under the general head of *gravelly soils*, being so much mixed with small stones. They have frequently, however, more sand, or clay, or calcareous loam, in their composition, than gravelly soils usually possess, and on that account, are treated of by some authors as a distinct species of soil.

Gravelly soils, from their parting so readily with moisture, are apt to burn, as it is called, in dry seasons; but in wet will produce tares, pease, oats, Indian corn and even wheat. It has been found that a thin stratum of gravel, if mixed with shells, and other marine productions, possesses many advantages for cultivation in a wet climate.

A gravelly soil, free from stagnant water, gives such an additional warmth to the climate, that vegetation is nearly a fortnight earlier, than where other soils predominate. About Dartford and Blackheath, in Kent, such soils produce early green pease, winter tares, rye, autumnal pease, and occasionally wheat, in great perfection. When barley and oats are cultivated, they should be sown *very early*, that they may have full possession of the ground before the dry season sets in. Gravelly soils, in a wet climate, answer well for potatoes; and indeed, in Cornwall, in a sheltered situation, with a command of sea-sand, and of sea-wood, they raise two crops of potatoes in the same year.

Poor gravelly soils, full of springs and sulphureous veins are very unfriendly to vegetation, and are better calculated for pasture than for arable culture.

3. *Clay*.—A clay soil is distinguished above every other for tenacity. It feels smooth, and somewhat unctuous. If cultivated in a wet state, it sticks to the plough like mortar, and does not soon become dry. It is often, indeed, of so adhesive a nature, that it will hold water like a dish. In a dry summer, the plough turns it up in great clods, it requires, therefore, much labour to put it in a state fit for producing either grain or grass, and it can only be cultivated, when in a particular state, and in favourable weather. Though it will yield under a proper system of management, great crops, yet being cultivated at a heavy expense, requiring stronger instruments, and stouter horses, it is seldom that much profit is obtained, unless when occupied by a judicious and attentive farmer. The very superior management of clay soils, as is practised in the Lothians, is fortunately an exception to this general rule.

The value of a clayey soil, depends materially on its having an open subsoil, which renders it more tractable and productive. Its texture is ameliorated by a suitable mixture of common sand, sea-sand, and above all, of limestone gravel, where that can be obtained. Peat-moss also, that has for some time been dug up, and exposed to the action of the atmosphere, may be used with advantage. It is likewise necessary to enrich it with putrid and calcareous manures, in the course of its cultivation: and it may be much improved by having a considerable quantity of ashes mixed with its putrescent manures. It is this which renders clayey soils, in the neighbourhood of towns, so extremely fertile.

Under proper culture, clay soils are well calculated for growing crops of beans, wheat, oats, clover, and tares; but not for barley, unless immediately after a fallow; nor for potatoes, unless under very peculiar management. In regard to turnips, they do

not usually thrive so well in clays, as in soils which are more free and open. But it is now ascertained, that the Swedish, and above all, the yellow turnip, may be raised in them with advantage;—that the quality is superior, — that if they are taken up early, the soil is not injured, — and that there is no difficulty in preserving them. Clays become good meadow-lands, and answer well for hay, or soiling, when in grass, but from their aptitude to be parched, they are, in general, unfit to be fed by heavy cattle in wet weather. In dry seasons the after-grass may be used to feed neat cattle till October, and sheep till the winter. A stiff clay, however, when not cold or wet, with a strong marl under it, is preferred in Cheshire and Derbyshire, for the dairy.

Ploughing previous to winter setting, is of great use to clays, by exposing the surface to the frost, which mellows and reduces it in a manner infinitely superior to what could be accomplished by all the operations of man. In this state, the soil remains till spring seed-time, when it is either ploughed with a shallow furrow, or merely scarified, (which is the superior practice), and sown.\*

The fallowing of strong clay (a subject to be afterwards more fully discussed), is by some eminent farmers deemed to be unnecessary, provided particular attention be paid to the bean crop, and to sowing early, horse-hoeing regularly, and weeding completely. Yet there are certainly many clay soils, both in England and Scotland, so tenacious and obdurate, so adhesive to every thing that comes in contact with them when wet, and assuming, when dry, such a stony hardness, that they are but ill calculated, in that stubborn state, for the purpose of vegetation. In that case, a summer-fallow is indispensably necessary every six or eight years; both to prevent such soils from contracting a most injurious sourness and adhesiveness from wet ploughing, and in order that, by exposure to the sun and winds during the summer months, they may be thoroughly pulverized, and aerated, and thus by cultivation, joined to the corrective influence of the atmosphere, may be brought into a state, fit for bearing abundant crops of grain and grass.

4. *Peat*.—This substance is unquestionably of vegetable origin. The difference between it and vegetable mould is this, that mould is derived from finer substances, as the leaves of trees,—the remains of arable cultivation,—and the roots, as well as the leaves and stalks of the finer grasses, which contain a large proportion of earthy matter; whereas peat is chiefly composed of various sorts of aquatic; which, instead of rotting on or near the surface, are generally immersed in stagnant water, and not decomposed. In valleys, peat-moss has often a considerable proportion of vegetable earth in it washed from the higher grounds.

An author who has successfully explained the nature of peat, has adopted the following classification: 1. Fibrous; 2. Compact; 3. Bituminous peat; 4. Peat mixed with calcareous matter; With sand or clay; 6. With pyrites; and, 7. With marine salt. Each of these, he contends, differs essentially in its composition and chemical qualities, and above all each species requires different treatment, in order to convert it, either into a soil, or into manure.

\* See our remarks upon fall ploughing in another column.

In converting peat into earth, it is a rule, to plough or dig it in autumn, that it may be effectually exposed to the winter's frost. If this labour be not commenced at a proper season of the year, and if the peat be once hardened by the summer's sun, it is hardly possible afterwards to decompose it.

The crops best calculated for a reclaimed peat-bog or moss, are, oats, rye, beans, potatoes, turnips, carrots, white and red clover, and timothy. Wheat and barley have succeeded on such lands after they have been supplied with abundance of calcareous earth; and the florin grass, (*agrostis stolonifera latifolia*), seems likewise to be well adapted to that description of soil, when moderately surface-drained.\*

The improvement of peat-bogs, and of all wet lands, must be preceded by draining; stagnant water being injurious to the nutritive qualities of the soil which all classes of plants absolutely require. Soft black peat-earth, when drained, is often rendered productive, by the mere application of sand and clay as a top-dressing. When peat contains ferruginous salts, calcareous matter is absolutely necessary to fit it for cultivation. When mosses or bogs or black muck abound with the branches, or the roots of trees, or when the surface entirely consists of living vegetables, they must either be carried off, or burnt. In the last case, their ashes furnish ingredients calculated to improve the texture of the peat. For this soil, soap-ashes are found an excellent manure.

In Leicestershire, England, and other counties, they have great tracts of meadow land, which, in many instances are the sites of lakes filled up, the soil of which is composed of peat and sediment, the former originally formed by aquatic vegetation, and the latter brought down by rains and streams from the upland. This forms a soil admirably calculated for grass.

The fens in Cambridgeshire, Lincolnshire, and several other districts in England, likewise consist of peat and sediment. They are pared and burnt for turnips, to be fed off by sheep, which, by their manure, enrich the soil. After two crops of grain, they are sown with grass-seeds, (two bushels of ryegrass, and eight or ten pounds of white clover), and remain in grass for five, six, or seven years; the longer the better. In the fens, beans have also been cultivated, but have not been found to answer; nor can fen land be followed with advantage; for it does not bear much stirring. On such soils potatoes, and above all, carrots, have been tried as an intervening crop, and with success.

The great object, however, is, to adopt the most proper management of fen or peaty land for hay crops; and here it is proper to mention a modern discovery of great moment. It is ascertained, that by suffering the second crop of grass, that might often with difficulty be converted into hay, to rot upon the ground, an immense produce of hay is ensured for the succeeding year, and that fen land may thus become a perpetual meadow. This important fact is corroborated by some experiments which have been tried near Oudenarde in Flanders, where the same effect has been produced, by leaving the second crop on the ground every second or third year: the grass produced the succeeding year, being of extraordinary length. The same expe-

\* A slight notice of this valuable grass will be found in our next number.

periment was tried last year with similar results on a farm up the Ottawa river about forty-five miles from Montreal. We shall bring our remarks on these important preliminary points to a conclusion in our next.

#### HOW TO COVER OUR RAILWAY GUARANTEES AND SUPPORT OCEAN STEAMERS.

*From the Toronto Patriot.*

In our publication of Friday last, we gave under our mercantile head, the Circular of Mr. T. Rigney, the head of a leading Canadian commercial house in New York, which in all probability has escaped the notice of most of our readers; but as it contains matters of grave import to the people of Canada. We now refer to it for the purpose of a special notice of its contents.

Mr. Rigney's circular informs us, that "in the United States the crop of all descriptions of grain will be most abundant, with a large stock of old wheat on hand, which, in consequence of the late low prices, has been withheld from market. The prevailing opinion is, that prices will not advance, but will continue with little variation at present figures." Now, this being the case, it is quite clear that the Canadian farmer has not the most remote chance of the United States being a market for the consumption of Canadian produce during the ensuing year, any more than it has been during the last four years, during which Free Trade has been inflicted on us, and thus one of the delusions by which Free Trade and Reciprocity were saddled upon the people is at an end.

But Mr. Rigney lays bare to us another misfortune arising from the delusion of Free Trade, we mean the evils which have birth in the diversion thereby of our transit trade with Great Britain from the St. Lawrence to New York. He gives us the total imports, in bond, to the United States from Canada of grain during the past year, and he states it as follows:—

Flour, (barrels).....	335,000
Wheat, (bushels).....	1,374,800
Corn, (bushels).....	2,457
Meal, (barrels).....	1,950

From which it will be perceived, says Mr. Rigney, "that the total export from the United States in 1850, reducing the wheat to flour, was equivalent to 1,389,354 barrels; and the import from Canada the same year equivalent to 609,960 barrels, being almost ONE-HALF OF THE TOTAL EXPORT FROM THE UNITED STATES." Nor is this import of Canadian produce by a neighbouring State declining; on the contrary, Mr. Rigney tells us, "The demand for Canada flour for the lower British ports still continues to absorb a large proportion of the receipts from Canada, at prices somewhat higher than the ruling rates of domestic;" and he adds: "if bought in Canada at reasonable prices, cannot fail to pay at the present low rates of canal freight."

Here then is important information for the Canadian farmer. One-half of the total export of grain from the United States was of Canadian growth, which brings a higher price than the domestic growth, and is consequently more profitable to our Yankee customer in the British market. Now, let us see what benefit our Yankee neighbour derived by this his trade with us in grain during the last year, and what we lost by not sending

it direct to the British market. Let us suppose that this equivalent to 609,960 barrels of flour was sent from Buffalo to New York. The present low freight and toll from that port is 85 cents per barrel, so that on 609,960 barrels of flour, the tolls and freight from Buffalo to New York would amount to the large sum of £129,616, exclusive of a duty of 2½ per cent., and as the average value of a barrel of flour during the past year was 21s. 3d., the gross value of this flour, is £648,082, and the duty thereon paid to the States for its transit in bond, would be £16,204; so that for freight, tolls, and duty on this single article of our produce, we put into the pockets of our neighbours last year £145,820. But with wharfage, storage, &c. added, we may safely say the sum of £150,000 was thus lost to Canada during the past year by shipping our grain from New York, instead of from a Canadian port.

But this is not all. The average profit to the Yankee exporter of our flour is two shillings per barrel, or £60,996 on the past year, and this added to the foregoing £160,000 swells our loss on flour alone in that year to £210,996. If we calculate the money we thus pay annually on other articles of Canadian produce, the total, we suspect, would exceed the whole revenue of the province.

We have occasionally heard a great deal of the madness of Canada, in thinking of a railway from the far west to Halifax. True it is a serious matter to guarantee the annual interest on four millions of pounds, which amounts to £160,000 a-year, and it may be serious to guarantee £10,000 a-year for Ocean Steamers from Quebec to a British port; but if that railway, as it must when complete, or these steamers, if put on, should take our export trade once more through our own territory and for our own advantage,—if they keep in Canada this £211,000 which we annually put into our neighbours' pockets on this single branch of our trade, and bring back all our transit trade to our own people and our own territory, surely we have the full amount of the annual guarantee at once fully covered thereby, and a handsome surplus to leave in our own pockets, or, in time, to pay the original cost of the lines. The sooner then we have our railways and our ocean steamers the better for every class of Canadians, whether merchant, agriculturist or labourer. With railways from the far west to our own sea-ports,—with a line of ocean steamers for the summer, and with an extended line of railway to Halifax for winter, then indeed would the trade of the west flow through our territory, and the prospects of Canada go far beyond our most sanguine expectations.—

#### TULLIAN GROWTH OF WHEAT: A WORD IN SEASON, BY HEWITT DAVIES.

MANY of your readers will recall the correspondence that has lately appeared in the *Gazette* on the Tullian theory of growing wheat year after year upon the same land, and without manure, simply by means of preparatory deep trenching and annually digging between the rows of the growing wheat. There is so much in the principle this involves that is opposed to the general ideas as to the all-importance of manure, and at the same time so much is to be gained in our practice, if it be true that by improved cultivation the occasion for manure for growing wheat is lessened, that I am

watching with great interest the progress of the seventh crop so sown, which the author of "A Word in Season" has now growing, and it was with much pleasure I read the following letter from him:—Vicarage, Lois Weeden, Towcester, April 29.—My dear Sir: You have taken so much interest in my farming operations, that you will be glad, though not surprised, to hear that my four-acre field of wheat, which you saw in the winter is attracting astonishment. It is certainly the most beautiful growing crop I ever beheld; it has all the fine qualities we look for at this season, even all over the land, and not varying the least in healthy colour." This report of the wheat I was fully prepared to hear, from the fine appearance I saw it presented in the winter; and now let me ask what more can be said of any crop that has had a preparation and a seeding at treble the cost? This instance of what may be done by tillage, without manure, to grow grain at much less than the usual charges, I regard as most worthy of attention. Not, as I have before said, as an example to be copied by farmers in its details, but as teaching the benefit to be gained from deep tillage and fine comminution of the soil between the rows of the growing crop; a lesson which an intelligent farmer would read to apply to trench ploughing his land, and hoeing and scarifying the ground between his young corn. The hop grower adopts the practice between his hops; in the spring of the year he turns over the ground with a fork, and breaks up the surface between the rows with his nidget, and he will tell you the practice is necessary to ensure a healthy and luxuriant growth, and the scuffling plough and scarifier have long been introduced between the rows of beans and peas, and roots on the best cultivated farms in Scotland, and the north, with great advantage to the growing crops, and still more to those that follow; and what is there to prevent a general extension of the practice to wheat, oats, and barley, now that we have Garrett's horse-hoe, which, at a cost of less than 1s. an acre, enables the farmer to hoe perfectly all grain, drilled even as close as 9 inches. In instancing this narrow width, I am far from thinking it so successful as much wider. I have long since abandoned anything closer than a foot, and am still getting wider; I have oats and barley at 21 inches, so as to admit of the scuffling plough passing between the rows, and expect I shall find this width near enough; and how can I think otherwise, when I find Tull in ruder times could grow 4 quarters of wheat on an acre, year after year, from double rows, with 4 feet intervals, and without manure; and I see Mr. Smith realizing 33 bushels an acre for seven successive years, from three rows upon 5 feet beds, and also without manure; and I will appeal to farmers holding only arable land, whose accounts have been so kept that their stock shows its cost and expenditure and loss upon it, whether a practice which lessens the occasion for manure and for keeping of stock be not a desideratum in corn growing of the greatest importance. The lessons we have had in shed-feeding, &c. are of the greatest value in teaching us how to produce manure at least cost, but the most valuable lessons of all will be those which teach farmers to do with less manure. The cost of manure produced at home is far greater, and has far more to do with the profit, and loss to be made in farming than many people are aware of.

## FLAX.

From the *Quebec Times*.

Having in a series of articles adverted to the cultivation of flax in Canada, we would follow up our advocacy of that question by laying before our readers the results of a few recent investigations made with a view of ascertaining the actual amount of fibre to be obtained from a given quantity of flax, the produce of this year's crop in Canada. We had no hesitation in asserting in each of our notices that the soil of this province presented every inorganic ingredient requisite for the production both of flax and hemp crops to an extent fully equal—if not superior to the overworked land of the British Islands. The products afforded by the samples here operated upon, were in every way corroboratory of the opinion we then expressed. A parcel of flax in the straw, fresh pulled from the field was sent us by Mr. McDonald, from the Seigneurie of Port Mout, of different degrees of fineness, from which we were enabled to select parcels of two different qualities fine and coarse, and to determine upon the relative productiveness of each, under the modern processes of separating the flax from the woody stem. The following are the results of a main of eight trials, conducted with all the accuracy and close attention we could possibly afford them. In no instance was there a loss of any portion of the fibre; consequently the products are to be regarded as maximum amounts, although fully attainable, either upon a large or small scale by any intelligent operator, from the same quality of raw material.

The loss of weight in operating upon 100 parts of dry flax was.

COARSE SAMPLES.	
Loss in separating glutinous matter.....	26,5
Loss in shives.....	52,0
	78,5
Pure fibre.....	21,15
	100,00
FINE SAMPLES.	
Loss in separating glutinous matter.....	26,5
Loss in shives.....	51,45
	77,95
Pure fibre.....	22,05
	100,00

These results exceed any with which we have been familiar in Europe; 18 or 20 per cent. of marketable fibre was always considered an extraordinary yield, and not grower out of ten can be said to realize this figure; a sixth or a seventh was, and is to this hour, considered a remunerative return.

To guard ourselves against misconception in treating of the soils suitable to the growth of textile fabrics, it becomes necessary to say a few words. We have repeatedly asserted, and challenged contradiction to our statement, that the fibre of flax or hemp extracted nothing whatever from the soil, that the organic elements, of which it is composed, are exclusively derived from the atmosphere. Why then give any preference to one soil above another, if the products derive no portion of its substance from such a source? The answer is easy and satisfactory. The flax plant will only develop itself healthfully and vigorously in a soil presenting all the

organic and inorganic food which it may require for building up the various portions of its structure, and if these demands are not duly administered to, its fibre producing function must suffer accordingly.

The soils of Canada, in their comparative freshness over those of the old Country, contain to a much greater extent the necessary supplies for the wants of the plant. And in general, the mechanical structure of the land itself, is highly favourable to its growth, long practice having shown the superiority of light loamy soils for this purpose.

When we consider the soil of those countries in which the manufacture of linen and other flax products has become the characteristic fact of their industrial history, we find in almost all cases except Ireland, a geological coincidence of constitution. In Egypt, whose dignitaries were clothed in purple and fine linen, and from whence the culture of flax has spread over the civilized world, the soil was formed by the mud carried down by the overflowings of the Nile, and spread over the surface of the lower country along its banks. The soils of Belgium and Holland, the countries now most remarkable for the excellence and abundance of their flax industry, have been produced by the accumulated mud deposited by the great rivers, which draining the greater part of Europe, discharge their waters by numerous channels into the German Ocean. The rivers which flow into the Baltic afford, also, on the low grounds along their banks, the seats of the flax agriculture of Russia and northern Prussia; and guided by these analogies, may we not ask, are there not in every part of Canada similarly constituted soils? The borders of her vast lakes and the margins of her mighty river offers boundless tracts of rich alluvium, beyond all comparison the most suitable for the production of flax and hemp. The districts about Lake St. Johns, as described by Messrs. Hamel and Baddely, are precisely of this character and origin, being evidently deposited from the water of a great lake, which at one period, must have covered the whole of the surrounding country.

## THE GREAT MUNSTER FAIR IN LIMERICK.

BY JOHN LONG, ESQ., C. E.

"In large Fairs, such as that held at Ballinasloe, the traffic consists chiefly in the interchange or transfer of stock, from the breeding and rearing farmer of the remote and mountainous districts, to the owners of the rich low-land tracts, where the cattle are fattened for the consumer, and it being especially in the low-land district, that the pastures are at present so much increasing in Ireland, any measure having for its object the opening up of new sources of supply to stock these pastures, at once becomes an object of interest to the stock farmer. The operation of the corn laws, and the disastrous occurrences of late years, have been leading causes of the increase in the pasture lands of Ireland, to which may be added the numerous districts throughout the country in course of reclamation, under the Arterial Drainage Act,—the fertile river tracts, thus reclaimed presenting in their improved condition, first rate fattening lands, many of them in the highest state of improvement, and admirably suited for stock farming, and with the other causes mention-

ed, throwing upon a large demand for young cattle in the rearing districts, and a large source of supply to the consumer. To meet these requirements it is obvious no arrangement could be more suitable for the south of Ireland than the establishment of a great fair at Limerick, whilst it would present to the graziers of the eastern and midland counties a ready and important supply from the extensive rearing districts of Clare, Kerry, Cork, Limerick and Tipperary, which would have the quick and convenient transit now afforded by rail, from Limerick, in various directions, and by the Shannon navigation through the heart of the country, affording facilities for transmission to all parts of the kingdom, unequalled in any other locality, the producer would be brought into immediate intercourse with the large buyer, without the intervention of the present jobber, and thus receive the best prices for his products. Nor would the advantages of the proposed Fair be confined to the transfer of stock from the remote districts to the fattening grounds of the eastern and midland counties for the proverbial fertility of the lands in the districts adjacent to Limerick, would always afford supplies for the wants of the consumer, thus enlarging the sphere of the operations of the fair, and conferring extended advantages alike on the breeder, the fatterer and the consumer.

Large farms are increasing in Ireland, and with the insufficient prices now to be obtained for products, and the increasing prices for stock of all descriptions, the rearing and feeding of cattle has become the best source of remuneration to the landowner and farmer: Accordingly well attended fairs have become necessary auxiliaries to the successful pursuits of the farmer; and amongst the many advantages that would arise both to the producer and consumer, by such a Fair, an important benefit would be secured in the increased stability of prices—the want of which is so much felt throughout the present small fairs of the country. Good prices may be obtained in a fair to-day, whilst a total falling off may occur in a neighbouring fair, in a few days after,—the accidents of weather or a slight diminution in demand, together with the uncertain attendance of buyers, materially affecting the prices in small fairs; whilst in the case of large fairs, a large attendance of buyers is always secured, who make it a point to refrain from purchasing for weeks before, and generally make their whole season's arrangements subservient to the supplies to be obtained from such a fair; these circumstances at once securing a good demand, and consequently, not only giving considerable stability to prices in the large fair itself, but tending materially to regulate and obviate the fluctuations in the prices at the smaller fairs of the district.

In short there could not be a more opportune period for carrying out a project which the wants of this part of Ireland have long since required, and which is, besides, in perfect keeping with our own times, when cattle shows, great exhibitions, and the collection of large industrial assemblies have become the necessary pioneers of our progressive age. A great fair, such as that proposed, would, in itself, form a great annual or half-yearly cattle show, where all the best stock of Munster would be assembled, and whilst in ordinary cases, the cattle that brought the best prices would become the proper test of superiority with the large gra-

zier and farmer, a system of premiums might be established for the middle and smaller class of farmers, which would encourage emulation, and give an important stimulus to a large class of the agricultural population, with whom there is a strong desire to increase their means and opportunities of rearing and feeding stock.

#### THE STRANGER GUEST, A TALE.\*



It was within a few days of the period which the stranger had fixed for his departure, and while he was sitting with Andrew Hodson and his family, that the steward was observed approaching on horseback; when their guest, as was his custom, retired to his room, and, by accident or design, left the door communicating with the apartment he had quitted partially open. The visit of the steward was on no very agreeable errand, as may be imagined, its object being to demand payment of the rent due at the preceding quarter-day, the amount of which Andrew had used every exertion to raise, but in vain. The steward became pressing, and affected to lament the necessity imposed on him, by the orders of his Lordship, to "strain for the money, if it were not immediately forthcoming. The farmer, on the other hand, pleaded for a delay of a few weeks, alleging the hardness of the times for agriculturists, the very high rent at which he stood, and finally the severe loss he had sustained by the failure of the banker. The other, in reply, merely stated that the instructions of his master were imperative, and admitted neither of modification nor delay. "Alas!" said the distressed Andrew, "is there no method by which the sacrifice of my farming stock and furniture can be prevented?" "There is one way, Master Hodson," rejoined the steward, "at which I have hinted pretty strongly upon more than one occasion, but you either could not or would not understand me. You know I have long loved your daughter Amy, and if you will effectually favour my suit, I need scarcely tell you, that I would strain a point rather than that my father-in-law should be degraded in the eyes of the world by an execution being served upon his premises, and himself ejected from the farm." "What, Master Jenkins, you marry my daughter Amy!" said the honest farmer. "Ay, that I will!" responded the condescending steward, evidently mistaking an exclamation of surprise for an interrogatory. "Stop, stop, Master Jenkins," rejoined Andrew, "not quite so fast. Have you ever said any thing to Amy about the matter?" "Why, yes," said the other hesitatingly, "I

have, but it is sometime since." "Well, and what did she say?" "Nothing very favourable, I must confess," continued the steward, "or I should have had but to ask your sanction instead of the exercise of your interest, and, if necessary, your authority, on the occasion." "What! I persuade Amy to marry a man she does not like! Are you mad, Master Jenkins!" "Not quite," was the reply. "But I think you are, or you would not so hastily reject my offer. Come, come, Andrew, see your own interest, and favour my views, and I will not only advance the money for the arrears of rent, but use my influence with my Lord to cancel the present lease, and grant you a new one on more easy terms." "No!" said the farmer, "not if you were to offer me the freehold, instead of a new lease. I will not sell my daughter to you, nor to any man, no, not if he were the king." "Then take the consequences, obstinate fool!" exclaimed the steward, throwing off the mask; "before you are three days older, you shall be left without a wisp of straw that you can call your own," and he quitted the house breathing vengeance upon the devoted farmer and his family.

It occurred that on the same evening the stranger, pleading increased lameness, kept his apartment, into which Amy carried his tea. He remarked that her air was that of deep dejection, and that she had recently been in tears. On one occasion their eyes met, and she beheld him gazing upon her with an expression of kindness and sympathy, of which she had scarcely believed his rigid countenance susceptible. "What has happened, my pretty maid, that you look so sorrowful?" said he, in a tone of almost paternal tenderness. "Alas, sir!" said the afflicted girl, "my poor father has long been struggling with hard times and a heavy rent, and, being unable to raise the sum due at the last quarter, they are going to put an execution, I think they call it, on the premises, and turn him out of the house. I do not care so much for myself, but for my poor father and mother to be cast upon the wide world, in their old age, without a shilling, and, it may be, without a friend to help them—oh, sir! it is hard, it is very hard!" and she burst into tears.

The stranger drew out his handkerchief, and, passing it over his face, complained of the closeness of the evening, and walked to the window for air; then, returning to Amy, he took her hand. "Nay, my poor girl," continued he, "be comforted; things may not come to so bad a pass as you anticipate; your landlord, from all that I know and have heard of his character, is not a man to push matters to extremities with so old and honest a tenant as your father." "Alas, sir," rejoined Amy, "the landlord, though they say he is far from being a bad-hearted man, lives abroad, and cannot, at this distance, know an honest tenant from a dishonest one. Besides, he leaves every thing to his steward, and he is a very wicked man, sir."

The stranger then quitted the room, pleading a desire to breathe a little fresh air before he retired to bed. On his return, in passing through the hall, he saw Andrew Hodson upon his knees, with an open book before him, and his fine countenance lifted towards heaven in the act of prayer, while

his family and domestics were kneeling around him. Unwilling to disturb them, the stranger did not advance into the room so as to be seen; but, as he contemplated the group, he could not help thinking that there must surely be something more in religion than his philosophy had ascribed to it, since it could inspire with calmness, and even thankfulness and resignation, a family who were upon the brink of ruin, and who might on the morrow, like the Saviour in whom they trusted, have not where to lay their heads. "And these," thought he "are they whom, under circumstances in which I should have been grateful to Providence for the preservation of my life, I stung with reproaches for what they could neither foresee nor prevent."

As he was passing on towards his bedroom, at the conclusion of the prayers, the farmer came up to him, and informed him of the calamity which was impending, intimating that it would be advisable for the stranger to depart early in the morning, as his horse would be included in the seizure which was expected to be made, under the execution, about noon. "I thank you, Mr. Hodson," was the reply. "for your friendly caution, but never mind the horse. You sheltered me in my misfortune, and I will not desert you in yours. I cannot help you out in the payment of your rent, for my purse, you see," continued he, producing it, "is somewhat of the lightest; but I will wait the event, and, if I cannot avert the storm, I will try to comfort you under it. By the way, farmer, a word with you: these retainers of the law will make clean work of it when they come. That steward, unless report belie him not, has the eye and rapacity of a hawk. They will not leave you so much as a wooden ladle. Now, I see you have some valuable articles of plate—that vase, for instance."—"Sir!" exclaimed Andrew inquiringly, having never before heard of such a thing. "I mean the cup and cover there," explained the other. "Ay," replied Andrew, "it was won by my grandfather at a ploughing match, it will grieve me to part with it." "No doubt it would," said the stranger; "there are those tankards, too—that ladle—those massive old-fashioned spoons; they are all very portable." "Well, sir?" said the farmer, not understanding the stranger's drift. "How dull you are!" rejoined the other, touching him with his elbow. "How easy would it be to get these things out of the way. You could confide them to some friend or relative—your mother earth, for instance—until the sweeping hurricane of the law has blown over. You understand me now, do you not?" "Sir," replied the farmer, "you mean well enough, I dare say, but you do not know old Andrew Hodson, or you would not have made such a proposal to him." "Tush, man! the thing is done every day." "I am sorry for it, sir, because the world must be much worse than I took it to be. The debt is just, though my creditor is a hard one, and I will pay him as far as the things will go." "But I maintain that the debt is not a just one. Is not the rent much higher than is warranted by the value of the land?" said the stranger. "No matter, I agreed to pay it." "You are too scrupulous by half." "Now what do you suppose, sir, my neighbours would think of me, if I were to follow your advice?" "Tut, tut, who will know any thing of the matter but you and I?" "God Almighty, sir," said the farmer. "But consider, my

\* Continued from page 15

good man," continued the stranger, "there will be enough to pay your rent without these articles, the value of which would set you up in the world again; for remember, these harpies will take every thing away from you." "No, they won't; they can't take my wife, nor my children, nor my good name; and I would not part with one of them for all the gold that was ever coined." "You will not be guided by my counsel, then, and remove the plate?" said the stranger. "No, not a teaspoon of it," was the positive reply. "Then I can only say," added the other, snatching up his candle, and hastening to bed, "that you are, without exception, the most obstinate, impracticable, honest old man I ever met with, and I must forever quit your company."

The morning arrived on which the storm, which had been so long gathering, was to break over the heads of the devoted farmer and his family, who were stirring unusually early. In fact, the expectation of the catastrophe had allowed them to sleep but little, as their looks, when they assembled at the breakfast-table, plainly indicated. The stranger also had quitted his bed an hour before his wont, and betrayed great restlessness in his manner, for he walked to the window which commanded the road every five minutes, as if watching for the arrival of the expected, but unwelcome visitors.

Giles Jenkins was in advance of his myrmidons a quarter of an hour's march, and, taking the farmer apart, said to him, "Master Hodson, I did not threaten you without the power to execute. The officers will be here in a few minutes, which you will do well to use in reconsidering my proposal. Give me your daughter, and not only shall every thing about you remain as it is, but the possession of it shall be secured to you for many years." The farmer, losing his patience at the repetition of the insulting proposal, shook off the tempter (who, in his earnestness, had taken him by the arm), and said "Villain, do your worst, for not for all you are going to take away from me—no, not for all your master's money; twice told, will I sell my lamb to the wolf." "Dotard," rejoined the steward, "you have pronounced your doom, and I go to fulfil it;" and quitting the farmer, he conferred with his followers, who by this time had joined him, and they proceeded in their duty by taking an inventory of the farming stock, before they began on the household furniture.

Robert Hawkhurst arrived shortly afterwards and assisted the stranger in his endeavours to console the afflicted family. One of the domestics at length informed them that the officers were coming into the house to finish their task, when the stranger betrayed some little agitation, and retired to that part of the room in which he was least likely to attract observation. He had scarcely time to effect this, before the steward and his retainers entered, and proceeded in their ungracious office, without the slightest respect to the feelings of the sufferers. Giles Jenkins, in particular, appeared to exult in the exercise of his authority, and to take a pleasure in witnessing the distress which his cruelty had occasioned. The silver vase, before alluded to, was standing on a kind of sideboard in the apartment. The steward, who was about to remove it, had no sooner laid his fingers on it, than the voice of the stranger was heard exclaiming, "Mr. Jenkins, I'll thank you to let that cup alone, for I like it very well where it is."

The steward withdrew his hand from the vessel, as if it had been of heated iron. He turned as pale as death, and he looked about in all directions, as if he thought the person from whom the voice proceeded was just as likely to drop from the clouds, or start out of the earth, as to make his appearance from any other quarter. The stranger at last arose from his seat, and with a dignity which none of the family had before observed him to assume, he advanced into the middle of the room, and confronted the steward, who, somewhat recovering from his surprise, and glancing at the other's bandaged leg, said, with an affection of great concern "My lord, I grieve to see your lordship so late." "You mistake, you abominable old hypocrite and measureless liar," said the earl; "a fortnight's residence in this house has cured me of my lameness, and of my blindness too, and, having recovered the use of my own eyes, I shall have no further occasion for yours." "My lord!" stammered the steward. "Your lord no longer," said the earl, interrupting him; "how dared you, sir, for the gratification of your diabolical passions, abuse the powers with which I entrusted you, and oppress this worthy man, in direct contravention of my injunction, that you should, on no account, distrain upon a tenant, unless he were a fraudulent one. Now, be pleased to relieve me of your presence, taking with you these two worthy associates; and, do you hear me, sir, let your accounts be made up with all despatch, for I shall shortly reckon with you. Then addressing himself to the farmer, he continued: "Mr. Hodson, I am very sorry for the trouble which this unfortunate affair has occasioned you. It was necessary, however, that I should have such evidence of that man's baseness. For yourself, I can only say, that your arrogant tampered, your present lease shall be cancelled, and substituted by another, at such a rent, that it shall not be my fault if you do not thrive again. I owe you this much for the lesson you have taught me of resignation under unmerited calamity, as well as for the instance you have given me of uncompromising integrity, under circumstances of temptation that very few would have withstood. I pray you to forgive me for the experiment I made on your honour in the matter of the plate. It is refreshing to me, in my old age, to meet with such examples in a world which, I fear, I have hitherto regarded on the darker side. Your kindness, Mrs. Hodson, and yours, Amy, to a putulant old man, I shall not forget; nor your honourable adherence to your mistress and her family in their adversity, Mr. Robert. Of you, Frank, I have a favour to beg; you must give me that tertier of yours, to which I am primarily indebted for my introduction to this house, and for the advantages which have resulted to me from it."

The earl, after taking a kind leave of the circle he had thus made happy, mounted his horse and departed to his mansion, from which he had been so long absent, and to which he was returning when he met with the accident already related. The occurrences which followed so inauspicious an event, produced a most beneficial effect upon his mind; he became a better, and, consequently, a happier man. His lordship took up his permanent residence on the estate, to the great joy of the tenantry, and to the discomfiture of Mr. Jenkins, who it is almost needless to add, was dismissed in disgrace.

I know it will be considered a somewhat trite termination if I finish my story with a marriage; and yet, should any of my readers be curious upon the subject, I cannot deny that such an event took place, and that Amy forgot all her past sorrows in her Robert's affections.

#### MICROMEGAS—AN ALLEGORY

The last time Micromegas paid us a visit, he was struck by a singular spectacle. He saw an enormous giant, laid at full length upon the ground, in the midst of a mighty orchard laden with fruit—chains were on his limbs, and weights upon his breast. The giant kicked most lustily against these restraints, and his struggles so convulsed the ground that every now and then they shook plenty of fruit from the neighbouring trees; the natives stood round, and seized the fruit as it fell. Nevertheless, there was far from being enough for the whole crowd, and the more hungry among them growled very audibly at the more fortunate and better fed. The compassionate Micromegas approached the throng: "And who art thou, most unhappy giant?" he asked.

"Alas!" said the giant, "my name is Industry, and I am the parent of these ungrateful children, who have tied me down, in order that my struggles to get free may shake some few of the fruits to the ground."

"Bless me," said Micromegas, "what a singular device—but do you not see, my good friends," turning to the crowd, "that your father, if he were free from those shackles, could reach with his mighty arms the boughs of the trees, and give you as much fruit as you wanted? Take this chain, for instance, from one arm and try."

"That chain!" shouted some hundreds of the crowd; "impious wretch—it is Tithes!"

"Well then, these cords."

"Idiot!—those cords are Bounties; you should be undone if they were destroyed."

At this instant up came a whole gang of elderly ladies, with a huge bowl of opium, which they began thrusting down the throat of the miserable giant.

"And what the devil is that for?" said Micromegas.

"We don't like to see our father make such violent struggles," replied the pious matrons; "we are giving him opium to induce him to lie still."

"But that is a drug to induce him to shake down no fruit, and then you would be starved,—spare him the opium at least."

"Barbarous monster!" cried the ladies, with honor, "would you do away with the Poor-laws?"

"My children," said the poor giant, well-nigh at his last gasp, "I have done my best to maintain you all, there is food in the orchard for fifty times your number, but you undo yourselves by the injustice of crippling your father. You mean well by me—you compassionate my struggles—but, instead of giving me liberty, these good ladies would set me to sleep. Trust to nature and common sense, and we shall all live happily together, and if these orchards ever fail you I will plant new ones."

"Nature and common sense, dear father?" cried the children; "oh! beware of these new-fangled names!—Let us trust to experience, not to theory and speculation."

Here a vast rush was made upon those eating the fruit they had got by those who, in the late scrambles, had got no fruit to eat;



and Micromigas made away as fast as he could, seeing too plainly that, if the giant were crippled much longer, those who had laid by the most fort would stand some chance of being tumbled by the hunger and jealousy of the rest.

## NOVEMBER.

Full Moon.....9th day...6 h. 27 m. P. M.  
 Last Quarter...16th day...h. 27 m. A. M.  
 New Moon...22nd day...h. 12 m. P. M.  
 First Quarter...30th day...10 h. 32 m. A. M.

## ANSWERS TO CORRESPONDENTS.

"A. Z." shall be written to.

J. SINCLAIR'S letter is under consideration.

"A WORKING MAN'S." *Lolutes Vermony for the Million*, although a clever article must not be extended beyond reasonable limits.

DAVID DRYLAND'S *draining and 'Apple-tree'* will both appear in our next if we have room for them.

Letters on the *CULTURE OF HOPS AND FLAX*, are on our table but are inadmissible for want of more practical details.



MONTREAL, NOVEMBER, 1851.

There is no circumstance, perhaps, which constitutes a more striking feature of the present extraordinary age as distinguishing it from all its predecessors than that which is to be found in the difference of the motives which induce men to congregate in large, and all but countless assemblages.

Of old, it was too frequently to engage in fierce and bloody conflict, or to celebrate some victory, where all that conduces to the well being of man had been ruthlessly desolated, and when tens of thousands of human beings had been mutilated or destroyed. Now is it to engage in friendly competition, in fostering and promoting those arts and sciences which administer to the necessities, the comforts, and the conveniences of mankind, or to celebrate some triumph in the onward progress of the human race. It was refreshing alike to the patriot and the philanthropist, to mark the thousands of stalwart men, and stately women too, assembled at the late Agricultural Fair at Brockville; all joyously and admirably competing with each other, or encouraging each other, in rearing the natural and artificial advantages, which a bounteous Providence has placed within their reach. The scene too,

must have been a salutary corrective to those who are in the habit of speaking so disparagingly of the country generally, as to lower its character in the estimation of those who have not an opportunity of judging for themselves.

The fair ground, about 12 acres, was admirably adapted for the purpose, and the arrangements reflected the highest credit on the managers. The ground rising in a gentle slope a to slight eminence near the centre, afforded a fine panoramic view of the whole; on its crest was reared the stem of a towering young pine, from whence waved in the breeze the Red Cross Banner, "the flag that braved"—but the quotation is trite, and somewhat thread bare. Around it were erected three enormous tents, designated respectively. The Floral, the Agricultural, and the Mechanics' Hall. Attached to a high board fence enclosing the ground, were arranged the pens for cattle, sheep, and pigs; on one side of the slope, was the ring for pacing horses, and on the other, the agricultural and mechanics implements were spread in almost endless variety and form. Some large exhibitors in this department had booths specially devoted to their own use.

The show of stock generally, as to quality was very good, but in quantity, as was expected, there was a sad falling off compared with former years. There was nothing new in the way of horses that was good, all being well known to those versed in the stock of the Upper Province. In cattle a change has evidently taken place, Devons and Ayrshires being on the advance, and sought after quite as much as Durhams, although, it must be confessed, the Durhams carried the palm. In Leicester Sheep, the quality was exceedingly good, several pens being filled with imported specimens of a superior kind; the show of fine woolled sheep was meagre. Of swine, I conceive, no better specimens have been exhibited in Canada.

The Floral Hall was filled to repletion with specimens of floral, horticultural, and artistic skill; to particularize in a bewildering maze of excellence, would be invidious, had it not been rendered almost impossible by the moving mass of delighted examiners; high over all however, was a floral temple, which, from its graceful proportions, and harmony of arrangement, elicited universal admiration. The Agricultural Hall was less crowded; the sam-

ples of produce, though rather deficient in number, were generally superior in quality. The articles which appeared to attract most attention, were the sugar beet and its products, Siberian oil seed, a new article for feeding cattle, and flax.

Of the show of fruit little can be said, with the exception, perhaps, of apples, samples of which, chiefly from the lower section of the Province, were so good as to lead our American friends to ask with astonishment,

"Why we sent our money to them for apples, when, for flavour, if not for size, we excelled them?" We cannot but ask the same question.

In the Mechanics' Hall, the exhibition of implements and machines was so various and extensive, as to satisfy the most casual observer, that if our farms be not well and profitably cultivated, it is not from any difficulty in procuring those articles. They are all within the reach of every farmer, if not manufactured at his very door.

The attendance at the Fair was very large, and at one time we should say there were 12,000 persons present.

At the County of Montreal Agricultural Society's Annual Exhibition the other day, we could not but perceive a marked and decided superiority over that of former years. This was more especially true, as regarded the brood mares and their one, two or three year old colts, and the difference in the sheep, as compared with those of a few years back, was still more strikingly manifest. But this is easily accounted for, from the fact that more than one or two of the best farmers in the country have taken great pains, by importing, and otherwise improving the breed.

We are happy to have it in our power to correct an erroneous statement which appeared to have got abroad, concerning this cattle show, and in doing this we have only to say that Mr. Dods had as much right as any body else to enter the lists of competition with his brood mares, and his bulls and cows, all of which are of a superior quality, but that he refrained from doing so, lest the high position in which he stood, as President of the Society, should, in the event of his obtaining prizes, have led the disappointed at least, to suppose that some undue influence had been exercised.

The ploughing match under the auspices of the County of Montreal Agricultural Society, came off at Petite Côte, on Wednesday the 15th inst. There were 23

plows in the field. For the first class, open to all, there were five competitors, three of which were all but equal. The judges, however, after a long and careful examination, placed Thomas Hodge of St. Laurent, at the head of the list, and to Amable Bourguignon of Coteaux St. Pierre, was awarded the first prize in the second class, which was confined to French Canadians. Alexander Desmarchais of Côté des Neiges, obtained the second. In the third class confined to young men under 21 years of age. We are delighted to have it in our power to state that Pierre Lemeux of St. Luc, the only French Canadian competitor, carried off the first prize. The work of these three French Canadians, was so well and beautifully done, as to lead us to hope that their names will appear next year in the list of competitors in the first class, and success to them say we if they do so!

The committee, judges, and gentlemen present, were most hospitably treated to a substantial luncheon by the President, J. Dods, Esq., and the other members of the Society, together with the hungry ploughmen, were provided with a capital dinner by Mr. Kidd, on whose premises the match took place.

The Plowing Match for the District of Montreal, under the auspices of the Agricultural Society of Lower Canada, came off at Varennes, on Wednesday the 22nd of October. Arrangements had been made for the conveyance of visitors from Montreal by steamboat, and between seven and eight o'clock, a large assembly, both of practical and amateur agriculturalists, took place at the wharf, from whence, embarking on board the Ste. Marie, and calling at Longueuil, where a considerable addition was made to their numbers; they reached Varennes about half past ten o'clock.

The day was all that even farmers—those almost proverbial grumblers about the weather, could desire. Sufficient rain having previously fallen, to make the ground in first rate order, whilst the sky was clear and bright, with a dry and bracing wind, just enough for pleasurable exercise in the open air. Among the company assembled, we noticed Mr. Quin, mayor of the Municipality of Montreal, Major Campbell, Messrs. Drummond, Evans, Leurrie, LeTourneaux of Belœil, Yulo of Chambly, Turgeon, Allard, Lanouette, Homie, Motreuil, and several priests from Vercheres,

Varennes, Longueuil, and many other places.

The following list comprises the names of the successful competitors distinguishing between those of British and Canadian birth, with the prizes awarded them:—

BRITISH.

Thomas Hodge, St. Laurent, 1st. p. of £1 0 0
Mr. Hutchison, St. Laurent, 2nd. " " 3 10 0
J. M. Ewan, Petite Côte, 3rd. " " 3 0 0
R. Lackhart, St. Thérèse, 4th. " " 2 10 0
Thomas Scott, St. Michel, 5th. " " 2 5 0
Mr. Holdmorth, Petite Côte, 6th. " " 2 0 0
Alex. Miller, St. Thérèse, 7th. " " 1 15 0
S. Fletcher, Petite Côte, 8th. " " 1 10 0
J. Drummond, Petite Côte, 9th. " " 1 5 0
Hugh Allen, Petite Côte, 10th. " " 1 0 0

CANADIAN.

L. Prudhomme, Côté St. Luc, 1st. p. of £1 0 0
L. Prudhomme, Côté St. Luc, 2nd. " " 3 10 0
Joseph Lafonde, Verulam, 3rd. " " 3 0 0
A. Desmarchais, Côté de Neve, 4th. " " 2 10 0
A. Bourguignon, Côte St. Pierre, 5th. " " 2 5 0
H. Valiquette, Point Claire 6th. " " 2 0 0
Felix Joron, St. Laurent, 7th. " " 1 15 0
Joseph Ozmet, St. Rose, 8th. " " 1 10 0
Ben Coates, Longue Pointe, 9th. " " 1 5 0
Hector Routier, Quebec, 10th. " " 1 0 0

After the plowing, some eighty gentlemen, with appetites well sharpened by the keen air, and exercise, adjourned to the hotel, and did ample justice to a substantial varied and elegant dinner, served up in Mr Girard's superior style; followed by an excellent desert; loyal and patriotic toasts, speeches, &c., &c., all going "merry as a Marriage Bell."

The judges for the British class, were Messrs. Brodie, Lanouette and Allard, and for the Canadian class, Messrs. Kempton, Drummond and Fisher.

During the time the judges were awarding the prizes, Mr. Cartier, M. P. P. for Vercheres, delivered a very excellent address to a large assemblage at the Church.

The following extract from Mr. Trudelle's report, we copy from a Quebec paper giving the award of the prizes at the Ploughing Match for the District of Quebec.

The various lots were measured by a surveyor; one hour 50 minutes were allowed for each lot, to the Canadians; and three hours and 36 minutes for each lot to be ploughed by the Europeans. The first task finished by a Canadian, was accomplished in 1 hour 15m., the last in 1 hour 33m. The European ploughmen finished their tasks in 2 hours 12m. to 3 hours 18m. The following are the names of the successful competitors:—

CANADIAN PLOUGHMEN.

Jacques Dion, Ancienne Lorette... 1st prize \$16
Thomas Hamel, St. Foy..... 2nd " 14
Is. Plaindoza, Ancienne Lorette... 3rd " 12
Pierre Dorion, jun., Charlesburg... 4th " 11
Edouard Bedard, Do..... 5th " 9
Charles Dorion, Do..... 6th " 8
Louis Lortie, Canadière..... 7th " 7
Antoine Lartie, Do..... 8th " 6
Joseph Delage, Charlesbourg..... 9th " 5
Hector Routier, St. Foy..... 10th " 4

EUROPEAN PLOUGHMEN.

George Plaine, Ancienne Lorette... 1st prize \$16
Charles Wilson, St. Foy..... 2nd " 14
George West, Do..... 3rd " 12
Anthony Scullion, Do..... 4th " 10
Richard Downey..... 5th " 9
George Eglinton, Stoneham..... 6th " 8
James West, St. Foy..... 7th " 7
John West, Do..... 8th " 6
Joseph Sleep, Little River..... 9th " 5
John Hyne, Do..... 10th " 4

DRAINING.



O much has been said and written on the necessity of draining, and on the palpable advantages resulting from it, that we may consider these as

preliminary matters already settled and agreed upon. We shall therefore proceed at once to speak of the manner in which this necessary and profitable operation ought to be performed.

The danger to be guarded against, and the great difficulty to be overcome, is the natural tendency, the water course at the bottom of the drain has to fill up. This arises from two causes:—the crumbling in of the sides from the action of the frost and the washing in of the soil by the surface water after heavy rains, or on the melting of the snow.

The former of these causes can easily be prevented by digging the drain deep enough to have the water course below the frost; the effects of the latter, however, are more difficult to guard against.

The cheapest mode of accomplishing the two great objects in view, namely, the digging the drain deep enough and filling it in securely enough, is of course the best, and we hesitate not to recommend the following as possessing this important quality.

Let the ditch be dug eighteen inches wide and three feet deep; then with a proper shoulder drain spade, about a foot long sink the middle of it, say, ten or twelve inches deeper, leaving a ledge on each side of four or five inches wide, then take a cedar log, and saw it into lengths of seventeen inches; split them into slabs three inches thick, and lay them lengthways, as closely as possible across the bottom of the ditch, so as to rest upon the ledges or shoulders, and to cover up the water course in the shape of the letter V which has been cut out by the shoulder drain spade already mentioned. Strew upon these slabs a little brush or buck-

wheat straw, or potato tops or corn stalks, and then fill in gradually all the length of the drain, and while doing so, if you have a pony on the farm, let a boy ride him along it to tramp it down solid. A drain made thus will last for ever.

One material point we have not yet adverted to and that is the distance between the drains. It ought not to be more than forty feet. When draining was first introduced into Scotland the drains were made from one and a half to two feet deep and about eighteen feet apart. After ten thousand miles had been laid it was found that they were not sufficient. They were then made from two and a half to three feet deep and forty feet apart. This system cost less and was more efficient, greater depth with greater distance was again unfavorable. This rule, however, only applies to level land; a wet hill-side for instance may sometimes require the drains to be much nearer or a single one at the head may drain the whole slope.

#### AGRICULTURAL REPORT.

The early part of the month that has elapsed since our last issue has been distinguished by a number of agricultural shows and other industrial exhibitions; of these the great Provincial Exhibition at Brockville is necessarily the most interesting and important.

During the last week in September and the first in October, the farmers were occupied chiefly in getting in their Indian corn, taking up potatoes, gathering their apples, &c., and in many instances in this section of the Province at least in harvesting their late oats.

Our anticipations of the Indian corn crop, we are sorry to find have not been realized; the yield is not so good as our readers, from what we said in our last, may have been led to believe.

The blight appears to have had no other effect upon the potatoe crop than to stop the growth of the tuber. The crop is consequently rather light but sound and good, unusually good, and perfectly ripe.

The turnip crop seems to have recovered from the effects of the blight with which it was attacked and is now in a very flourishing condition. This circumstance prevents us from adverting again, as we promised in our last, to the experiment of sprinkling it with salt.

The carrots, such crops of them at least as have happened to come under our own

observation, are of a most luxuriant growth. Thus, in one instance in particular, that we saw where the management was good but the soil uncongenial, was most curiously and strikingly exemplified by their growing *out* of the ground some five or six inches high, because they could not grow down into it, but grow was the word with them, and grow they did, it was a splendid crop.

Apropos of this crop, farmers, generally speaking, are by no means aware of its value. In our opinion it is equal to that of a crop of potatoes under the most favourable circumstances, how much more valuable therefore is it now under the adverse ones to which that crop has of late been liable; we may be wrong in this opinion, and if so, we are quite as willing as a learned contemporary of ours "to be put to rights," rather a rare and amiable quality, by the way, in an Editor. The difference in the value of the seed of these two crops is a matter not to be omitted in this comparative estimate. Our information however concerning this crop, we confess, is rather limited, any communication on the subject from practical farmers would therefore be very acceptable and thankfully acknowledged.

**MANGEL WURTZEL.**—Of this root crop we have seen little or nothing beyond a few patches: these however have materially tended to strengthen and confirm the high opinion we have long entertained of its value. All we could say however on the subject would be merely a repetition of our remarks upon the carrot crop. Although our attention at this season of the year is chiefly directed to the consideration of the various root crops to which we have alluded, yet it is by no means exclusively so, for there is another crop of far higher—nay, of paramount importance in Upper Canada especially, and which we are happy to say has been brought under our observation in a variety of instances during an excursion into the lower section of the Province from which we have just returned. We allude to fall wheat; the few specimens we saw, and we were exceedingly sorry they were not more numerous, were of so luxuriant a growth as to lead us to anticipate a heavy crop.\*

\* Fall wheat in the Lower Section of the Province ought to be sown two or three weeks earlier than in the Upper Section. Our opinion is, that it could be sown with advantage in both as early as the middle of August; in such case it would of course be necessary to eat it down with sheep.

The farmers are now, at the time of our going to press, all busily engaged in their fall plowing; and many and various are the benefits to be anticipated from it, their name is legion, but we warn them from our own experience against sowing in the spring upon a Fall furrow. Green sward or a *strong* clover root neither of which can well be plowed a second time had better be left for a single plowing in the spring. If any farmer hesitates to believe our assertion let him try the experiment on a small scale. In either case let him leave a ridge or two, for instance in a field, to be plowed in the spring, and he will soon perceive a manifest superiority of the crop upon such ridges. The sooner grain of any kind is sown after plowing and the better the crop will be. We recollect an instance many years ago strikingly corroborative of this assertion. One half of a field was plowed on a Saturday and the other half on the Monday following, when the whole was sown with barley and seeded down with clover, in the grain crop there was a sensible but trifling difference but in the grass the following year there was a difference of at least half a ton to the acre. The following is cut from, we know not what paper, and we may as well mention here once for all, that we do not deem it necessary to be more particular with regard to any little extracts of a similar description which we may choose to make, unless in cases when the extraordinary nature of such extracts, or the doubtful character of the authority from which they are taken, should lead us to question their authenticity.

**GRAIN CROP OF 1851.**—From every section of the wheat growing part of the continent, the news is very flattering. In Ohio, Illinois, Indiana, Iowa, Michigan, Northern Pennsylvania and Wisconsin, the increase may be safely set down at one-quarter over any previous year, and about one-third over the crop of last year. And this increase is not confined to wheat alone, for the earth has teemed with abundance of everything that is used for food by man or beast, except corn; the heavy drought has much affected that article—how much we are yet unable to say, but if it is as serious as represented, it may materially affect the price of pork; in fact, from the present appearance pork is about the only article the farmer will have to sell that will maintain the price of last year. From the accounts given in the Liverpool

papers, there never has been a better crop raised on the European Continent than the one just harvested.

## STATISTICS.

Referring to page 9 of our October Number, for statistical tables which contain matter having a most important bearing upon the prosperity of the country; we lay before our readers the result of the commercial operations of the Province, for the year 1850.

Total value of imports into

Canada.....	£4,245,517	3	6
do do of Exports.....	£3,235,948	15	9

Balance of Trade against the Province.....	£1,009,568	7	9
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Thus there is a charge against—a tax upon—the productive industry and home trade of the people, of over one million of pounds, to balance the amount of the foreign trade. To realize the magnitude and importance of one million of pounds, or four millions of dollars—it should be remembered, that, that sum more than equals the whole provincial revenue, added to an amount that would pay the interest of capital, sufficient to build a rail road through the entire length of the provinces, say, from Halifax to Windsor.

Assuming that there is no farmer from Gaspé to Lake Huron, who is not fully alive to the injurious effects of excessive taxation, and of the lavish expenditure of the public revenue; we would draw attention to the circumstance that this adverse balance of trade, must act much more prejudicially both upon general and individual interests than either taxation or extravagance; because, in the one case, a very large proportion, perhaps not less than two thirds of the public revenue, is always expended within the province; whilst in the other case every shilling is sent out of the country never to return.

Believing that there is nothing in the natural, political, or social condition of Canada, to render such a state of things unavoidable, we purpose to devote our time, and some space in succeeding numbers, to enquire into the cause of this balance of trade. Presuming, that there can be no difference of opinion, as to its being in a high degree injurious, we shall be greatly in error, if it is not found, that its removal depends mainly upon the intelligence, energy, and industry of the farmers.

The inquiry we are about to enter upon, divides itself into two branches, 1st, the systematic supply of the home market, and 2nd, the judicious production of articles for exportation.

The supply of the home market—as far as the geographical position of the country, and the natural capabilities of the soil and cli-

mate will allow it to be done—is the most important element in public prosperity. How far is this made the policy and practice of the people of Canada? That the basis of Canadian wealth is now, and must be for an indefinite length of time for the future—the production of the soil, is a proposition to which it is anticipated no exception will be taken. We have already published a list of some twenty articles—representing a value of nearly one million of dollars—all of them connected with the cultivation of the soil, and which are imported, though there is no question but that every one of them could be produced, not only for the entire supply of the home market, but, many of them for exportation to any desirable extent. We have in our possession general statistics, and experimental results, bearing upon the cultivation and production of most of these articles, which we shall lay before our readers in succeeding numbers of the CANADIAN FARMER. In this number we propose to confine our attention to sugar; because, it forms a very large item, of our imports, involves no risk, and is not included in our previous list.

There was imported into Canada last year, Of unrefined sugar about 6,414 tons, the value of which may be estimated as £150,000.

France is almost entirely supplied with sugar made from Beet Root, the produce of about 60 manufactories. In Germany, and many parts of Central Europe, it is manufactured and used to a great extent. The making of Beet Root Sugar is therefore no speculative theory. Can its production be made profitable in Canada? There is already one establishment for the manufacture of sugar from Beet Root at Paris in Western Canada, conducted by Dr. Naphegyi an Hungarian Refugee. We had the pleasure of meeting with that Gentleman, soon after his arrival in this Country, and from our knowledge of him, should readily place the most implicit reliance upon any statement he would put forth. At the Provincial Agricultural Fair at Brockville, Dr. Naphegyi exhibited samples of sugar, of Molasses, of various cordials and of Alcohol made at Paris, from Canadian grown Beet Root. The sugar was fully equal in grain, in colour, and flavour to good Muscovado. The possibility of producing it in Canada, is therefore a settled question. But, would it be profitable? The Doctor delivered two addresses before the Officers and Members of the Association in the Court House at Brockville, explanatory of the statistics, and partly of the process of the Manufacture. The seed is imported from France. A fair average crop of sugar Beet, is about 20 tons an acre; a really good crop would be about 25 tons; but, to be on the safe side in his

calculation, the Doctor took 15 tons as the basis of his statement. The price given at the Manufactory is three dollars a ton, returning to the farmers 45 dollars an acre, equal to a crop of wheat of 55 bushels an acre at four shillings a bushel—and a much more certain crop. The Root yields about 10 per cent of sugar, one acre of land therefore would give one and a half tons of sugar. As the consumption of unrefined sugar last year was equal to 6413 tons, to supply that demand would require 64130 tons of Beet Root, to be grown on 4275 acres of land, returning direct to the farmer, £48,093. The Doctor received several orders for his sugar from Gentlemen present at his addresses, we believe there was no stipulation as to price, further than an understanding that it would be cheaper than Muscovado. There can be little doubt that under an extensive demand and systematic manufacture it could be sold much cheaper, perhaps for a little more than half. For, the process involves no great expense, after the erection of the plant and machinery, the rest being principally labour somewhat analogous to distilling or brewing. Some of the shut up distilleries, would perhaps be admirably adapted for sugar manufactories. It will be observed also, that the cost of the Root at the manufactory, leaves a margin of more than £100,000 on the invoice price of the sugar imported to meet the expenses of the manufactory and allow for a profit. Now, the wholesale price of Muscovado of low quality in this market is £40 per ton, or, £256,520 for the quantity imported, this more than doubles the margin for expenses and profit.

The advantages to be attained by the introduction of the manufacture of Beet Root sugar into these Provinces, are, 1st, the striking off a considerable portion from the balance of trade against them—2nd, the distribution of a large sum yearly for the material—and 3rd, the saving of perhaps a larger sum on the cost of sugar to the consumers. This is of course contingent upon the possibility of the manufacture being profitable; and in favour of that conclusion, there is the experience of foreign countries, and an experiment actually made here to prove that it is not only profitable but easy for Canada to supply herself with sugar, for which article she expends yearly—very near a £150,000—which sum going to enrich other countries, is so much of a tax upon the productive industry of her own People.

LARGE MARKET GARDEN.—The FITCHES of Fulham, England, keep 12 horses in constant employment in marketing vegetables, drawing manure &c., for their market garden. They employ 150 laborers in summer, and 70 in winter. So perfect is their culture, that a visitor asserted that he had not seen a weed on their whole 150 acres.

## NOTICES OF NEW WORKS.

We have received from Mr. Robert W. S. Mackay, the Prospectus of a Statistical, Commercial, Legal, Medical and Travelling Chart of Canada, which he has now in course of preparation. The work, according to the Prospectus, will exhibit at one view the Population, Revenue, Expenditure, Imports and Exports of the Province. The Nature and Extent of the Public Works of the Province, their Cost and Revenue. The Executive Government of Canada, and the Officers of the Public Departments. The Judges of the Court of Queen's Bench, Chancery, Common Pleas, Superior, Circuit, and County Courts throughout the entire Province, with their Places of Residence. The Sheriffs, Crown Land Agents, and County Registrars of Canada, with their Places of Residence. The Advocates, Attornies, and Barristers at Law, now practising throughout the Province, with their Places of Residence. The Medical Practitioners of the Province, with their Places of Residence. The Banking Institutions of Canada, the Capital of each, and Names of the Presidents, Cashiers, and Agents, together with a complete Travelling Chart of the Province, upon an entirely original plan, exhibiting the Distance and Rates of Fare, by Steamer, Rail Road or Stage, from Quebec, Montreal, Bytown, Kingston, Hamilton, London, Amherstburg, and Goderich, to the principal Towns and Villages of Canada; the Calculation embracing over 500 points to which the Distances and Rates of Fare are given. It will be printed on fine paper, on a sheet of 2 feet 6 inches by 1 foot 10 inches, and will be delivered to Subscribers mounted on Cloth and Rollers, and Var-nished, or put up in Pocket-Book Form suitable for Travellers, at 5s. a copy, or at 3s. a copy for plain sheets.

A reference sheet of this nature cannot fail to be exceedingly useful in every counting house and store, and from the low price at which it is to be published, will doubtless command a ready sale. It is to be issued by Mr. John Lovell, St. Nicholas st., to whom orders are to be addressed.

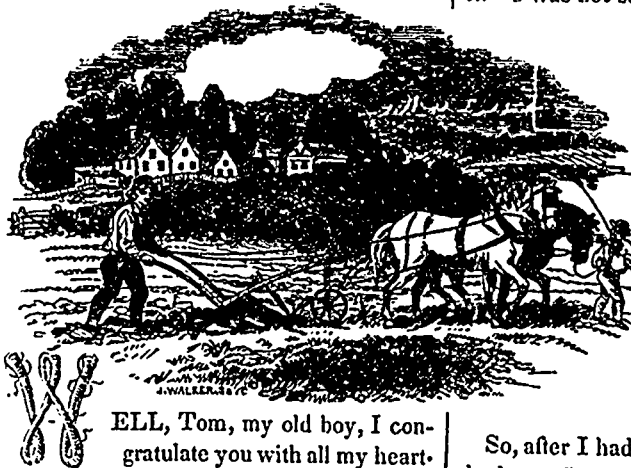
NOTES ON NORTH AMERICA. Agricultural, Economical and social. By JAMES F. W. JOHNSTON. Two vols. Boston: LITTLE & BROWN.

Most of our readers are aware that Professor Johnson spent some time in the British Provinces and the United States, in the latter part of the year 1849 and the early part of 1850. He delivered a valuable address at the Fair of the New-York State Ag. Society at Syracuse, and an interesting and instruc-

tive course of lectures for the same association, at Albany. These have been published, and have been extensively read by the people of the United States. He also delivered courses of lectures at Boston and Washington. His opportunities for seeing the practical agriculture of the country, were less favourable than they would have been if his visit had been at another season of the year. With the exception of the few days spent in the state of New-York about the time of the Fair, his time, from his first landing at Halifax, till about the first of January, was spent chiefly in New-Brunswick, having been engaged in making an agricultural survey of that Province. From Syracuse he went to Buffalo, by railroad, without delay, and from thence, by Niagara Falls he passed down Lake Ontario and the St. Lawrence to L over Canada and New-Brunswick. He went to the States again in January; his lectures in the city of New-York were given in that month, and he left for England on the third day of April. His journey was extended as far to the south as Alexandria, Va.,—his route and mode of conveyance, in all cases, being that usually adopted by business travellers. This will show that he had comparatively little opportunity to study American agriculture, and will account for various mistakes into which he has fallen. His work is designed as a record of what passed under his observation during this visit. We cannot at this time go into an extended analysis of the work. Though designed, chiefly, for the British market, it will be found in many respects interesting to the Canadian public, to whom we recommend its perusal. At the same time we cannot refrain from extracting the following sentence, which will serve as a key to the understanding of some passages which will be likely to attract attention: "It is unpleasant to a stranger to be always called upon to admire and praise what he sees in a foreign country; and it is a part of the perversity of human nature to withhold, upon urgent request, what, if unasked, would have been freely and spontaneously given."

## SUMMER FALLOW.

OR A HINT FOR FARMERS' DAUGHTERS TO GIVE TO THEIR SWEETHEARTS.



ELL, Tom, my old boy, I congratulate you with all my heart. And so you've got married at last eh?" exclaimed a jolly young farmer to his friend on meeting him at the Provincial Exhibition at Brockville the other day.

"But pray tell me," he continued, "for I am very curious to hear, how you managed to obtain the stubborn old father's consent."

"Oh, that's easily told; it was the summer fallow that did it," was the curt reply:

"The summer fallow! What in the world had the summer fallow to do with it?" asked his interlocutor in no little bewilderment.

"Every thing," was the calm reply, "but I see," he continued, "I must tell you how it was and all about it."

"Well! then," he said "to begin at the beginning, it was agreed on all hands that Bella and I, we had been brought up together from childhood, should be married as soon as I had got my farm clear of debt; but this turned out to be a much heavier job than I anticipated, the farm was large and the land good but quite exhausted and so my crops failed and I was in utter despair. The period when the last payment would become due was rapidly approaching and I had no means of meeting it. Poor Bella was as much distressed at the dark prospect before us as I was. It produced so complete a change in her whole conduct and deportment as to attract the notice of her father who with a very little questioning elicited from her a true statement of the cause. The old man cheered her up with some kind encouraging word and said he would ride over and see what I was doing."

"Well over he came, I knew the old poney half a mile off and my heart leapt to my mouth when I saw who was riding it. I was not sure that he was coming to

see me till he turned in at the open bars, leading into the largest field on my farm, about twenty acres, where I was at work plowing, with my hired boy picking off stones.

After kindly shaking hands with me he asked me to walk over the farm with him, he would like to see it, he said,

So, after I had given some directions to the boy, off we started: but before we got half way across the field he stopped and asked me what I was going to do with it.

"Sow it with wheat," was my reply.

"With wheat!" he exclaimed with a sneer, "and never see your seed again."

"Oh yes!" I said putting as good a face upon it as I could, although I was afraid he was more than half right, "I certainly expect that and a little over to help to make up my last payment," which will become due next winter, this was the spring.

"And what other dependence have you?"

I was silent for it was indeed my only one.

I took him over the rest of the farm, and he seemed to *glaze* a little as he observed the fields well cleaned up and the fences in good repair and when we reached my solitary homestead every thing about it was so neat and trim and the provision of fuel so ample as to elicit from him a smile of approbation.

On taking his leave he kindly invited me to his house that evening, a thing he had never done before and I worked harder that day and in better spirits than I had ever done for months before.

The evening came and of course I went to his house not doubting but that I should see Bella, but no, when I knocked at the door it was opened by the old man himself, his daughter and her mother he said in answer to my anxious looks had gone over to a neighbour's house to spend the evening. But never mind he continued, come in, I want to have a little talk with you about that unfortunate farm of yours and then abruptly added as he handed me a chair, "That big field must be summer fallowed."

"And what," I replied "will old Hebson say to that when he sees I have no means of paying him? This was the man I owed the money to.

"Oh," he said, "I have been to see him and have settled the matter so far that he is willing to wait another year for you."

I thanked him with all my heart and promised to follow his advice about the big field.

I went home that night you may be sure with a light heart; only fancy the old fellow driving away on my account, full twenty miles or more. M. Hebson's house where he had been was at least ten miles off. I certainly considered the circumstance altogether as a very favourable omen, and so did Bella when I told her all about it the first time I saw her about three weeks afterwards, but I might have saved myself the

trouble as she knew as much about it as I did and asked me with no small degree of anxiety and earnestness if I was going to summer fallow the big field.

Well I *did* summer fallow it; bestowing the utmost pains upon it—working at it almost night and day,—actually giving it the last harrowing by moonlight. The soil was a light loam and therefore easily tilled and I had it all like a garden and the seed in by the twenty-sixth of September.

It came up beautifully and soon covered the ground and in less than two months, just before the winter fairly set in, when Bella and her father came over to see it, it was nearly ankle deep. The crop, in short, was so promising that I ventured to urge my suit anew and to ask his consent to our immediate union, but no, it wouldn't do. "There's many a slip," he said, "between the cup and the lip," and I must see the debt paid or the means to do so fairly secured before I can give my consent."

Fifty pounds was the amount of the debt I owed, and I owe it yet, but on showing him the heaps of wheat in my granary from that field—nearly six hundred bushels and not quite all threshed out, he was perfectly satisfied and we were married three weeks ago, and a right jolly wedding we had of it. The old man was the merriest of us all especially while impressing it upon the people present that they could never get married without a "SUMMER FALLOW."

Pleased as we were and as we hope our readers will be with this little story, and happy and successful as the results of a "summer fallow" in this instance appear to have been, they by no means concur in the old man's decision. In other words, we think that the young farmer *can* get married *without* a "summer fallow." A thorough naked fallow is of course here meant. We object to it as unnecessary and unprofitable. In the instance before us, for example, our young friend need not have lost a crop. He ought to have given this "big field" another plowing and then sown it with tares which he could have cut green and made into hay by the middle of August, and had a thick and luxuriant second growth to have plowed in three weeks or a month afterwards. This would have cleaned his land as well as a fallow and the after-growth would have materially enriched it. Tares, as a fallow crop, are not appreciated as they ought to be, such at least is our opinion, but as it is

not founded on actual experience we should be glad to receive, from the more intelligent portion of our readers, any communications on this interesting and important subject.

#### POLITICAL ECONOMY FOR THE WORKING MILLION.

BY A WORKING MAN.

Continued from Page 11.

Having thus very briefly, merely suggestively, and without argumentation, endeavoured to point out those simple and self-evident facts, which constitute the matter at issue, the evils and commotions which afflict mankind; it may be asked, are there any indications of a remedy by which they may be allayed if not removed? Truth is constrained to answer,—No.

It has been stated, that the different forms of those evils and commotions converge and meet upon a part of the people, who are subject to physical privation; are in want of the necessaries, comforts and conveniences, upon which the well being of man depends; Now these conveniences, comforts, and necessaries; constitute that which is expressed by the word—wealth. This fact brings the whole matter, within the range, of what is called the science of political economy; for that is precisely the science, which professes to teach, how aggregates of men become wealthy; that is become possessed of necessaries, comforts and conveniences; it should therefore, if it be really a science, account for—at least incidentally—the strange anomaly, that in every civilized Society, a part only of the aggregate becomes wealthy, and another part is doomed to hopeless poverty. Errors either positive or of omission, in a science professing to teach, that which Political Economy professes to teach—errors teaching what is not true, or less or more than is true, must be productive, in practice, of most injurious consequences.

Much uncertainty frequently prevails, and much misunderstanding frequently arises, from the want of agreement as to the meaning of words; it will be of importance therefore to define what is to be understood by the word science; and then to enquire whether political economy, as at present taught, possesses the general characteristics, which entitle it to rank among the sciences.

Fully aware, that for a working man to call in question, the received theories of any science, is to expose himself to the charge of being bold, rash, presumptuous;

—it might perhaps be sufficient for the writer to deny the charge. He is, however, possessed by the belief; that he is actuated by higher motives. Observation, enquiry, and experience have demonstrated to his mind, the reality of the injury and suffering resulting from the action of those things, which are proposed as the subject of discussion. Beholding facts from other points of view, and investigating those facts under different circumstances; he has arrived at different results, at other conclusions, from those arrived at, by many wise and learned men, who have devoted their time and talents to similar inquiries; and he has done so, after much hesitation and much self distrust. Desirous of eliciting "Truth, without mystery, mixture of error or the fear of man:" The writer has received encouragement from the consideration, that many, very wise and very learned men, have advanced propositions, have fortified them within an apparently unassailable rampart of evidence; and have surrounded them with deep entrenchments of apparently unanswerable arguments, and such propositions have been received for ages, as unquestioned scientific facts: which propositions subsequent investigations have demonstrated to be unsubstantial fallacies, vanishing before the light of truth, like the mist of the mountain before the rising sun. To doubt a theory or a principle of political economy, is not an act of quite so much hardihood, in the present day; as at one time it was, to doubt the ancient theory of astronomy, or to doubt the truth of Aristotle's Dialecticks. Thoroughly convinced that most injurious fallacies are received and acted upon as principles of political economy; and without this conviction, the writer would be justly chargeable with presumptuous meddling, he claims the right of bringing his ideas to the ordeal of public opinion, he will endeavour to avoid even the appearance of dogmatism; nor will he consciously advance any thing but that which he believes to be true, and when he falls into error, should those errors call down correction—though he will defend himself to the utmost of his ability against injustice or malevolence, yet, he trusts he is prepared to receive that correction, even though harshly administered in all teachableness.

After this, perhaps, not unnecessary digression, the thread of the discussion leads to the inquiry—What is meant to be

expressed by the word science? The definition of the word science is, that it expresses the idea of a "certainty grounded upon demonstration," or of "art built upon principle." To constitute a science, therefore, is from simple facts attested by the evidence of the senses, to deduce and make known the laws which the great Creator of the Universe has enacted for the purpose of securing, specific, uniform, and certain results.

Thus to constitute a science of mechanics, there is the simple fact of the existence of inert matter, of which existence the senses can take cognizance, it can be seen, felt, and moved. From this fact is experimentally demonstrated the principle or law, that the whole momentum or force of a moving body is the result of its quantity of matter multiplied by the velocity with which it is moved. This law is found to be universal in every form, combination or change of motion, and upon it is built the whole science of mechanics. So of chemistry, the senses take cognizance of the fact, that matter having certain distinctive properties, will unite with matter having other distinctive properties, and will form a combination, totally different in form and appearance to either of the original elements, and from this fact is experimentally demonstrated, the law or principle of chemical affinity, upon which is built the whole science of chemistry. From the simple fact of the existence of fluids, of which the senses also take cognizance, is experimentally demonstrated the law or principle, that fluids press equally in all directions, and upon this law is built the two sciences of hydrostatics and hydraulics, and so on of all sciences, from facts deducing principles, until man is enabled to penetrate far into the infinitude of nature, and of space, and demonstrate that,

"That very law that forms a tear,  
And bids it trickle from its source;  
That law, preserves the earth a sphere,  
And rolls the planets in their course.

One proposition may be here stated, and its truth strongly insisted upon, which is, that all those laws or principles, and all others of every kind, that are really scientific principles or laws, as they have been enacted by the same Great Law Giver, must agree with each other whenever they come in contact, and that in every case, and under every possible combination of circumstances. Any jarring, any opposition, any inconsistency there would

destroy, the harmony of nature and impugn the wisdom of the Law Giver.

Having thus sought to obtain a knowledge of what is to be understood when the word science is used. The next enquiry is, whether political economy as at present taught, possesses the general characteristics which will entitle it to rank among the sciences. The senses take cognizance, that man from his organization, must have food, clothing, shelter; and also of the fact, that by the exercise of his natural powers and faculties, or by labour, those things can alone be obtained. Now as food, clothing, shelter, in their ultimate manifestation, constitute that which is called wealth, and as that wealth can only be obtained by means of labour, it follows therefore, as a necessary sequence, "That labour is the source of wealth," and this is the fundamental law or principle of political economy, and is illustrated in the divine denouncement. "In the sweat of thy face shalt thou eat bread." Thus far, teachers of political economy, may be confidently and safely followed; but beyond this, the student becomes enveloped in a cloud of details, (mixed with facts) of the most heterogeneous character, through which he must find his way as best he can, and from which, though it may be possible, it certainly is not easy to deduce any thing which can be made to appear like a general principle. And even when that has been done, a source of uncertainty still remains in the circumstance, that teachers are not agreed as to facts and details; what confidence can be felt then in the truth of the principles inferred from them? In proof of this, take one so called principle: and this is selected, because it may be more easily inferred, because it is more distinctly enunciated, and because it has a broader practical manifestation than any other; always excepting the fundamental principle—that labour is the source of wealth—and that is the one that lays at the foundation of the whole commercial policy of the world. "That it is upon the whole, best, that men should buy in the cheapest market, and sell in the dearest." To carry this out, requires (indeed, the principle itself supposes,) the most unrestricted freedom of intercourse, the most perfect freedom of trade, and yet upon the propriety and advantage of this unrestricted intercourse, this perfect freedom of trade, there exists the greatest diversity, the most entire contrariety of opinion. Then of

what is this so called principle the sequence? This seems to be difficult, if not impossible, to answer; it does not appear to spring from any self evident fact; it does not appear to follow as a natural sequence from any other principle, which does spring from a self evident fact; it is true, it may be inferred from a cloud of details, but where is the certainty that the details are true? Besides, this is inverting the natural order, the details must spring from the principle, and not the principle be built up by the details. Then again, does this so called principle harmonize with other admitted principles? It is an admitted principle of jurisprudence, that in all cases, individual interests must be subservient to, must give way before public interest; but for men to buy in the cheapest market, and sell in the dearest, it is manifest in every case, makes the public interest subservient to, or give way to individual interests. It is a principle of Ethics, having the sanction of God himself, "Do unto others as you would they should do unto you." To buy in the cheapest market and sell in the dearest, certainly does not harmonize with that principle, the two principles come into the direct collision with each other. The conclusion seems to be irresistible, that this so called principle is not a law enacted by the great Law Giver of the Universe. That it is not a scientific principle at all, and that to teach, that it is, is to teach that which is not true; and therefore, that political economy as at present taught, does not rank among the sciences.

There is also, a strange, a most extraordinary incongruity, in all theories of political economy. They take little or no account of the powers and faculties, the bias and desires of the agent man; by whom and for whom all its practical manifestations are to be developed; indeed, it is scrupulously, and rather ostentatiously declared, that political economy seeks to teach, to know nothing but how wealth may be obtained. Is not this teaching less than the truth? How can the powers and faculties, the bias and desires of the agent or labourer be separated from the duties or labour he is called upon to perform? How can a knowledge of the best means to secure the application, of the greatest amount of productive force or labour; how can a knowledge of the best means of performing labour, be obtained, unless account be taken of the powers and faculties of the labourer.

MONTHLY SUMMARY OF NEWS.  
GREAT BRITAIN.

At length we have some authentic, although very unsatisfactory, because imperfect news of the Franklin expedition.

The following memoranda by Dr. Kane, Surgeon to the American Expedition will be read with great interest:—

MEMORANDA.—1. On the 26th of August, 1850, traces were found to the northward of Port Innis, Wellington Channel, confirming those previously found at Capo Riley by Captain Ommanney. These consisted of fragments of clothing, preserved meat tins, and scraps of paper, one of these bearing the name of M'Donald, medical officer in the expedition.

2. On the 27th, Captain Penny's parties reported graves. These were at once visited by Captain De Haven, Mr. Penny and Dr. Kane. They bore respectively the names of W. Braine, R. M., and John Hartnoll of the Erebus, and John Torrington, of the Terror, the date of the latest death being the 3rd of April, 1846. Added to these sad but unmistakable evidences, were the remains of the observatory, carpenters' shop and armorer's forge. Upon the hill side and beach were fragments of wood, metal and clothing, with stacks of empty meat tins. Everything indicated permanency and organization. There can be no doubt that the cove between Cape Riley and Beechy Island, facing Lancaster Sound, was the first Winter station of the missing vessels. On the 31st of September, the impervious ice of the Wellington Channel underwent a complete disruption, and by the 6th several vessels penetrated to the Cornwallis side. Such, however, was the impenetrable character of the pack in Lancaster Sound that by the 10th of September, the entire searching squadron were again concentrated about eight miles south of Griffith's Island. This was the furthest west attained by the American expedition. The latest dates from Commodore Austin are of the 13th of September.

They were then in momentary expectation of making Winter quarters, and it is probable that a small harbour, discovered by Captain Ommanney, about three miles east of Cape Martyre, will be the haven selected. There the American vessels, while proceeding homeward, were frozen in opposite Wellington Channel, drifting during the ensuing Winter from latitude of 75 25 throughout the channel and sound to Baffin's Bay.

Their liberation, after much exposure and trial, took place on the 10th of June, 1851, at a point south of Capo Walsingham 65, 30—a linear drift exceeding 1,050 miles. The commotion of the ice, with its attendant uncertainty, was their chief source of trial. Every officer and man had marked scorbutic disease, but no deaths, have occurred. The crews are now refreshed, and the expedition is endeavouring to regain the seat of search.

I have, &c., E. K. KANE,  
Surgeon to the Expedition.

The *London News* gives great importance to these notes, and says:

The intelligence of traces of Sir John Franklin and his companions has been scanned with eagerness by the veteran Arctic explorers now reposing on their laurels at Woolwich, and many of them are sanguine in the expectation that they may yet have the pleasure of welcoming at least the sur-

living portion of the noble crews who left Woolwich in May, 1845, with the Erebus and Terror. It may be interesting to know that the Royal Marine whose grave was found was Sergt. William Braine, of the Woolwich division, who volunteered to proceed to the Arctic regions with the Exploring party, although he had only recently returned from service in China.

IRELAND.

The agricultural reports give a very favourable representation of the harvest generally; and even the potato crop is considered as likely to yield a very fair return, although fears are now expressed regarding the lumpers species—those sown at a later period of the season by the poorer classes. The lumper is an inferior kind of potato, used by those classes on account of its cheapness as seed and its prolific produce.

Subsequent accounts, however, from various parts of England and Ireland represent the potato blight as becoming more serious: the prevalence of dry weather would, it was expected, retard the progress of the disease.

FRANCE.

From the continent there is little news, although much uneasiness as to the future is showing itself in many quarters, and France is far from tranquil, particularly in the Provinces. The department of the Ardecho has carried disturbance and agitation so far that the government have put it in a state of siege.

A wide-spread conspiracy—perhaps got up by the police, has been discovered in Paris, and a vast number of arrests have taken place. This huge alleged plot seems, however, to attract little notice. The result of the deliberations of the council-general may be thus stated: 80 have pronounced for revision in some form or other. Of these, 74 voted for legal revision according to the constitution—that is, by a majority of three-fourths of the Legislative Assembly, which, of course, is out of the question. Five only have asked for a revision of article 45, which renders the present chief of the Executive ineligible, and one of these demanded expressly the prolongation of his powers. One has asked for the re-establishment of hereditary monarchy; and five have voted against all revision—the great department of the Seine has yet to "pronounce." It is very clear that the opinions enunciated by these bodies can have little or no effect upon the issue of the question.

TURKEY.

French papers state that Kossuth and his companions had been set at liberty and sailed from Constantinople on the 7th Sept., for America, on board the steamer Mississippi. This vessel, formerly reported on shore at Smyrna, had got off, and by previous accounts had reached the Dardanelles.

Advices from India were considered discouraging. Those from China favourable.

THE KAFFIR WAR.

Sir Harry Smith appears to have made no movement of consequence during the previous month, while the Kaffirs and Hottentots are spreading themselves through the eastern provinces and penetrating the settlements previously considered secure from danger.

A correspondent at the Cape, under date Aug. 1, says: "From what I can learn, Major Warden has been defeated in the Sovereignty, the Kaffirs are within five miles of Uitenhage, and the war is consequently in the heart of the Colony."



CANADA.

NAVIGATION OF THE ST. LAWRENCE.—The following, from the *N. Y. Courier & Enquirer*, shows the importance attached by our neighbours to circumstances which excite but little notice amongst ourselves. When we consider the resources of Canada, and the little use which our statesmen make of the mighty power for good which they hold in their hands, we are constrained to exclaim, "What would not the Yankees do with the St. Lawrence, if they had it?"

From the *Courier & Enquirer*.

"One of the most admirable illustrations of the workings of the tariff act of 1845, we have recently found upon record, is contained in the first few lines of the following paragraph from a recent issue of the *Portsmouth Argus*. The iron alluded to was brought originally from the English rolling mills, and besides superseding the American product in our markets, was conveyed to its destination in the West by a route avoiding our internal improvements, and thereby escaping even our railroad and canal levies, by passing through the waters of the St. Lawrence and the Lakes free of American tolls. We commend this paragraph to the attention of our readers; for in its brief revelation of facts it is more eloquent and argumentative than a volume of free trade essays:—

"We learn by a gentleman from Montreal, that this last summer a vessel of 400 tons burthen, laden with railroad iron, sailed from Quebec for Chicago—that she passed up the St. Lawrence to Montreal, thence by the canals and river to Lake Ontario—thence by the Lake and the Welland Canal to Lake Erie, thence by the Lakes to her port of destination. After delivering her cargo of iron at Chicago, she, on her return, took on board at Lake St. Clair a cargo of staves and returned to Quebec, sailed thence with her cargo on board for Liverpool. Further, that the rapids of the St. Lawrence, between Lake Ontario and Montreal, have been carefully examined and surveyed this season by experienced and skilful engineers, who reported, that by an outlay not exceeding £10,000—equal to \$10,000—the obstructions in the river can be so far removed, that a loaded vessel of 1000 tons burthen can pass down the river from Lake Ontario to Montreal, over all the rapids, without difficulty; and that the same vessel can return by any of the canals, carrying back a return cargo, equal to half the vessel's capacity. We also learn, that the merchants of Montreal are now maturing a project for having a regular line of steamers to run between Montreal and Liverpool, when the St. Lawrence is free from ice; and between Liverpool and Portland, in connection with the railway, when the river St. Lawrence is obstructed by ice."

The Provincial Parliament has been further prorogued *pro forma* to the 17th of November.

MARKETS.

LONDON, October 4th.

CORN EXCHANGE.—A fair average supply of English Wheat has been received this week. For most kinds, the demand has ruled steady at stationary prices. Fine qualities of foreign wheat are held at full quotations; but the value of low and middling qualities is almost nominal. The general aspects of the markets for all kinds of produce is dull with a downward tendency of prices.

Imperial weekly average per quarter:  
Wheat 36s. 7d., Barley 25s., Oats 19s. 6d.,  
Rye 25s. 4d., Beans 28s. 8d., Peas 27s.

MONTREAL, 26th October, 1851.

ASHES, Pots, per cwt.....	a. d. a. d.	27 0 a 27 8
Pearls.....		28 6 a 28 9
FLOUR—Canada Fine, per brl.		
196 lbs. . . . .	16 0 a 0 0	
Superfine, No. 2 . . . .	17 3 a 17 6	
Do No. 1 . . . . .	17 9 a 18 0	
Fancy & Extra Sup. 18 3 a 19 0		
Sour. . . . .	15 0 a 16 0	
Amer. Sup., in bond 18 3 a 0 0		
INDIAN MEAL, 196 lbs . . . .	13 6 a 0 0	
OATMEAL, 224 lbs . . . . .	21 0 a 0 0	
GRAIN—Wheat, U. O. mixed, 60 lbs . . . . .	3 7 1/2 a 3 10	
Red . . . . .	None	
U. S. mixed . . . . .	3 9 a 0 0	
L. C. Red, per minot. . . . .	3 6 a 3 9	
BARLEY, per minot . . . . .	None	
OATS . . . . .	1 7 a 1 8	
PEAS, White . . . . .	2 8 a 2 9	
INDIAN CORN, 56 lbs . . . . .	None	
PROVISIONS—Beef, Mess., brl	None	
Prime Mess. . . . .	30 0 a 41 3	
Prime . . . . .	27 6 a 31 3	
Cargo . . . . .	0 0 a 0 0	
PORK—Mess . . . . .	86 3 a 0 0	
Prime Mess. . . . .	70 0 a 71 3	
Prime . . . . .	65 0 a 67 6	
do in bond, Foreign Inspected, . . . . .	None	
Cargo, . . . . .	0 0 a 0 0	
BUTTER, inspected, No. 1. . . . .	0 7 1/2 a 0 7 1/2	
Do. No. 2. . . . .	0 6 1/2 a 0 6 1/2	
Do. No. 3. . . . .	0 5 4 a 0 5 1/2	

Flour has been in fair demand for the lower ports. The quantity reaching market from the West, is small. A small lot of inferior wheat have changed hands at 3s. 7 1/2d. to 3s. 9d. Pork is tending downwards, the quotations may be considered nearly nominal. New beef in better request. Butter dull, except first quality.

New York, Oct. 23rd.

Flour was 6 cts. cheaper, 8000 barrels having been disposed of at \$3, 75 a \$3, 87 1/2 for ordinary, and \$3, 81 1/2 a \$4, 06 1/2 for fancy. Canadian sold to the extent of 1000 barrels of fine No. 1 in Bond at \$4. Wheat, Barley and Rye appeared heavy, and in favour of buyers. Pork is lower, New mess \$8,50 a \$10,50 with a falling market.

LIVERPOOL, Oct. 13th.

(By Telegraph from New York)  
Flour has advanced from 6d. to 1s. per barrel for fine qualities. Wheat is 2d. per bushel dearer.

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The Publisher of the CANADIAN FARMER will be obliged to those Gentlemen, to whom copies of this and the preceding Number are sent, in the event of their declining to become subscribers to the publication to re-mail the copies sent, addressed to the Office. All retaining the Numbers will be considered as subscribers and charged accordingly.

THE CANADA DIRECTORY.

THE Subscriber respectfully announces that the above work will be published about the 10th of November. The Volume is a Royal Octavo of 622 pages, full bound in leather, and contains returns of the Professional and Business Men of every kind, in over FIVE HUNDRED AND FIFTY of the Cities, Towns, and Villages of Canada, together with the Names and Residence of the Public Officers throughout the Province; a complete Post Office Directory of Canada, and a mass of Statistical information regarding the Province, such as has not hitherto been presented to the public in any one publication.

JOHN LOVELL.

N. B.—Subscribers are respectfully informed that the delivery of the work will be commenced at SEVEN DIFFERENT CENTRAL POINTS IN THE PROVINCE, about the 15th of November, and will be continued simultaneously throughout, till all are supplied.

Montreal, 1st November, 1851.

HAYS' HOUSE,

Dalhousie Square, near the Parade Ground, MONTREAL.

THE Subscriber in returning thanks to the public for the liberal share of patronage which he received during his management of "Donagann's Hotel," previous to its destruction by fire, begs respectfully to call their attention, and invite their support to the Magnificent Establishment, where he is now to be found, viz: the Hays' House, which has been erected and furnished at a vast expense, and is now in every respect the First Hotel in British North America, the situation is exceedingly pleasant, being on the highest ground within the City proper, and in the immediate vicinity of the Parade Ground, Dalhousie Square, City Hall, Public Offices, &c. The Panoramic View from the upper part of the house, and cupola, is truly delightful, extending over the entire City, the River, and the beautiful country to the south of the St. Lawrence. There is a Promenade Musicale in the splendid and spacious Ball Room, every Tuesday evening, during the season of travel, at which the excellent Military Band of the troops in Garrison assists. The Bath Rooms are large, comfortable, and numerous, so that no delay need occur at any time in procuring one. The Table will at all times be supplied with every delicacy of the season which can be procured. The Wines and Liquors, will uniformly be of the best Brands, and every attention will be paid which can add to the comfort, convenience, or enjoyment of those who may honour the House with their patronage. N. B. Carriages are always in attendance to convey passengers to or from the Steamboats and Railroad Cars, free of charge.

GEORGE F. POPE.

The "CANADIAN FARMER" is published on the first of each month, at one dollar a-year, by JOHN SMITH, entrance St. Joseph Street, to whom all communications are to be addressed, post paid.

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