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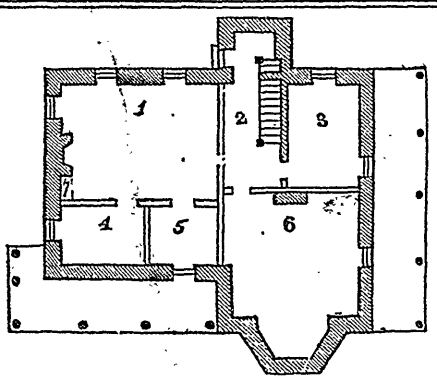
THE AGRICULTURIST

AND CANADIAN JOURNAL.

Devoted to Agriculture, Literature, Education, Useful Improvements, Science, and General News.

Wm. McDougall, Editor. Wm. McDougall & Co., Proprietors.

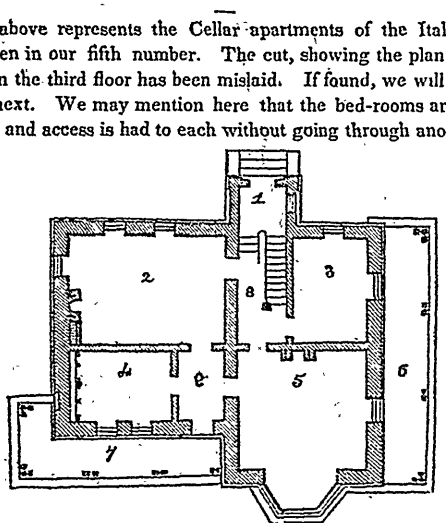
VOL. I. TORONTO, APRIL 15, 1848. NO. 7.



CELLAR APARTMENTS.

1. Kitchen.
2. Passage.
3. Bedroom.
4. Pantry.
5. Furnace or Store-room.
6. Cellar.

The above represents the Cellar apartments of the Italian Cottage given in our fifth number. The cut, showing the plan of bed-rooms on the third floor has been mislaid. If found, we will insert it in our next. We may mention here that the bed-rooms are six in number, and access is had to each without going through another.



GROUND PLAN.

1. Entry.
2. Dining-room.
3. Nursery.
4. Library.
5. Parlour.
6, 7. Verandah.
e. Hall.

The size of the several rooms will of course depend upon the size of the house, which must be regulated by the wants and means of the person proposing to build.

Butter.—The great point in making good butter, and that which will keep, is the freeing it from all buttermilk; and if everything else is well done, if this point is overlooked, good butter is impossible for any length of time. The mixture of milk in any degree with the butter is sure to produce frowsiness or an unpleasant taste to the butter: and the entire freedom from this constitutes the grand secret of making good butter. There are many who think washing butter with water incompatible with retaining the rich flavor, but if the water is cold and pure it is scarcely possible any thing should be washed away, the buttermilk which destroys the flavor of all butter excepted. Besides, the best butter in the world, and that which in all markets commands the best prize, viz., Dutch butter, is invariably made in this way; and where the example has been followed by others, it has rarely failed of success. If any, however, doubt the propriety of washing butter, they may use any method they choose, provided the milk is separated perfectly. Perfectly free from the substance that causes it to assume the putrid frowsy taste of bad butter, if may be kept with almost as much ease as tallow; solidity in packing, clean, sweet vessels, and a low temperature, will ensure its keeping for any reasonable time. Let no one expect good butter, however, so long as coarse impure salt is used; or a particle of the buttermilk is allowed to remain in it.—*Domestic Annals of Butter.*

Carrot.—The long orange or red is generally preferred, both for garden and field culture: the short orange is the earliest and deepest color.

Soil.—Carrots require a light, mellow soil, with a mixture of sand. The ground should be dug or trenched deep, and well broken up, in order to give plenty of room for the roots to penetrate into the soil; it should also be made fine, smooth and level.

Sowing.—As the seeds have a fine, hairy furze on the borders or edges, by which they are apt to cling together, they should be well rubbed between the hands in order to separate them. To forward vegetation, they should be soaked in warm water about twenty-four hours, and then mixed with dry sand, so as to separate them as much as possible in sowing. They should be sowed in a calm time, and scattered as equally as possible.

The seed should be sown in drills about an inch in depth; the rows from eighteen to twenty inches apart, so as to give plenty of room to hoe between them. Some recommend from nine to twelve inches, and others from eight to ten: this may answer in small family gardens, where the land is scarce; but where there is a sufficiency of ground, the carrots are more easily cultivated, and will thrive better and grow larger at a greater distance.

Field Culture.—The best soil for field carrots is a deep, rich, sandy loam. To obtain a good crop, the soil should be a foot deep at least, and well prepared by very deep plowing and thorough harrowing, so as to make the ground perfectly mellow, smooth and level. It is a matter of importance to wet the seed and cause it to swell, so as to hasten vegetation; because the weeds are apt to start very quick after sowing, and if the seed is not quickened, the weeds will get up and overpower the carrots, before they get large enough to hoe. The seed may be sown in drills, as directed for garden culture or on moderate ridges, from two to three feet apart.

Agriculturist and Canadian Journal.

TORONTO, APRIL 15, 1848.

TRANSPLANTING AND MANAGEMENT OF TREES.

We have just had an opportunity of glancing over a very full catalogue of the Trees, Plants, Shrubs, Flowers, &c. &c. for sale at the "Toronto Nursery," which is owned and managed by Geo. Lesslie & Co. We have the highest opinion of the honesty and skill of the proprietors of this splendid Nursery, and believe they will give satisfaction to those who may deal with them. One of the proprietors, we understand, is connected with a Nursery at Rochester—equal to, if not the best in the State of New York. We are glad to see an enterprise of this kind on so extensive a scale, in full operation in our vicinity, and we hope it may succeed. Much greater confidence may be placed in the productions of a nursery in our own neighbourhood, which are to some extent acclimated before transplanting, than those brought from a milder or more southern climate, and a different soil.

We take the following excellent hints from their catalogue, which at this season will be well worth the attention of our readers:—

1st. Before you procure your trees, prepare the ground you intend to plant, in the best style. if it be a border in your garden where you intend to plant the finer fruit or dwarf trees, trench it to the depth of two feet, turning in a liberal supply of old decomposed manure. If it be orchard trees, prepare your ground by a thorough deep ploughing; if necessary, plough it twice or three times. It is much easier to put land in good order *before* trees are planted, than *afterwards*. But where circumstances will admit of it, orchard ground should be cropped one, or even two seasons before hand, with a view to its improvement and preparation.

2nd. Prepare, in one corner of your field, a good heap of compost, by mixing fresh barn-yard manure, with an equal quantity of leaf mould from the woods, and muck, or peat; a quantity of leached ashes, if convenient, may be added; and when the land is not naturally calcareous, a small quantity of lime. This makes an excellent manure for trees. We use it extensively and recommend it from experience. It is cheap and within the reach of every farmer.

3rd. When your ground is thus prepared, and your compost heap in readiness, you are ready for planting, which should be done as follows:—Dig holes for your trees not less than three feet square, and two feet deep, throw the sub-soil aside, and fill into the bottom of the hole, sufficient fine, friable surface mould, mixed with a couple of shovels full of the compost, to bring it to a proper depth to receive the tree.

4th. Prune off, carefully, all the bruised or broken portions of roots, and place the tree in the spot prepared for it, in a perfectly upright position, spread out the roots carefully in their natural order, and after having mixed two or three shovels full of the compost with the earth, which should all be finely broken, fill it in. This must be done in such a way that every cavity will be filled up; when the roots are covered, a pail of water thrown in serves to wash the earth in among the roots; after the water has settled, fill in the remainder of the earth, and press it down gently with the foot; and thus the planting is completed.

5th. Trees should never be planted so deep but that when the earth settles, they will stand just as they did in the nursery. Deep planting is much practiced, and is fatal to the health and vigorous growth of trees. The upper roots should be two or three inches below the surface—not more in any case.

6th. In all cases where it may be apprehended that the wind will blow the tree about, so as to made an opening around the bottom, (as is the case generally with trees of even moderate size,) care should be taken to prevent it by tying the trees firmly to a stake, in such a manner as not to injure the bark. Some matting, or old cloth, may be put around the tree or between the tree and the stake, to prevent collision.

7th. Watering is sometimes deemed necessary after spring planting, when a drought prevails; and, under such circumstances, if properly performed, may be very advantageous. But the common method of throwing it on the surface, is labor lost, and worse. Instead of penetrating the earth and affording nourishment to the thirsty roots, it quickly evaporates and leaves the tree in a more likely state of perishing than it was before. The earth becomes baked and completely impenetrable to atmospheric influence, so essential to vegetable growth. To give water promptly and effectually, the surface should be removed to the depth of two or three inches, and the water then poured in, and the snrface soil finely pulverized, replaced.

8th. Mulching or covering the earth around the trees, as far as the roots extend, with litter or rough manure, to the depth of three or four inches, is one of the best methods of saving late spring planted trees. If trees are properly planted in the way we have directed, and the mulching is immediately performed, there is little danger of the tree, even if dry weather should ensue. It is much preferable to watering, but both are unnecessary, except in cases of late planting, followed by dry, hot weather.

CAN A FARMER LEARN TO ANALYZE HIS SOIL?

To the Editors of the Agriculturist.

GENTLEMEN,—

As a farmer in this region of country, I, like many others, have laboured under great disadvantages from the want of a scientific knowledge in my profession. A want, which I am necessarily compelled to believe, and to acknowledge as painfully vexatious in its circumstances, and ruinous in its consequences, compared with the profitable and satisfactory results which proceed from a judicious and scientifically systematic mode of cultivation. Numerous statements have been made by learned agriculturists, both theoretical and practical, of the great advantages that may be, and that are derived from pursuing a systematic course of farming, conducted on principles in accordance with laws physically organized, but from these advantages, we in this isolated portion of the country, have hitherto been precluded from a participation in, partly from our contracted means, and partly from a want of inclination. With a climate by no means uncongenial to the successful cultivation of a great variety of fruits and vegetables, and with a soil abundantly productive, yet, notwithstanding our most assiduous industry, combined with all the skill which long experience has made us master of, our crops sometimes prove a complete—often a partial failure. The question is often asked, how can we account for these things? Conjecture is set afloat to investigate into the cause of the failure of this crop and into the failure of that crop, and every cause assigned but the true one. Many of my neighbor farmers who suffer in common with myself, are beginning to awake to a true sense of their position, and are beginning earnestly to enquire after the light of science, and the most eligible means of its attainment, which if once attained would no doubt form a new epoch in the system of farming in this part of Canada West. But how are we to attain this? Would you or some of your correspondents be kind enough to inform us whether, if we were to purchase scientific books, we could progress so far as to be able to analyze the different soils, or whether, if we were to unite, we could, procure the services of a professional man for some two or three months through the course of the season, to lecture for us, and teach us to analyze the different properties of the soils? Would you be kind enough to inform us also, what apparatus would be necessary, and what would be the expense?

Yours respectfully,

THOMAS BOYLE.

Sandy Point, near Amherstburg,
20th March, 1848.

In reply to Mr. Boyle, we may state, that a complete and exact analysis of a soil requires the skill of a practical analytical chemist. Indeed, to be able to state accurately all the ingredients contained in a given soil, with the relative proportions of each, supposes the possession of the highest skill; the process is extremely nice and difficult, and often requires weeks to complete it. But there are three or four substances that are essential in all soils, to the healthy growth of the ordinary crops. Potash, lime, magnesia, &c. If a soil, for instance, be entirely, or nearly deficient in lime, it would not raise a good crop of clover or lucerne, while it would produce rye grass in abundance, and even a fair crop of wheat, if not deficient in other substances which these latter require. Now it does not demand a practised chemist to tell whether a soil be deficient in lime. An intelligent man may soon learn enough chemistry to ascertain such a point. A mere tyro may apply tests, and satisfy himself whether lime be present in large or very small quantities. And the same may be said

of potash or soda. Again, wheat and other grain crops require a large amount of phosphoric acid. If the soil be deficient in this, it will be impossible to raise good crops. A partial knowledge of chemistry will enable a person to determine that question, and the same partial knowledge will point out to him the substances or manures which contain this ingredient, viz: bone dust, guano, &c. The nature and quantity of the various ingredients contained in the different manures are, of course, explained by chemists, and may be ascertained by reference to their works.

We mean therefore to say, that a sufficient amount of chemical knowledge may be obtained from study and observation, by an intelligent farmer, without resorting to the laboratory of the practical chemist to enable him to form a tolerably correct judgment of the nature of his soil, and whether any of the substances absolutely essential to the growth of crops are in excess or deficient. He will probably be able to learn enough in this way for all the practical purposes of cultivation. Professor Johnston's Catechism of Agricultural Chemistry, a little book of 74 pages, contains a rich mine of information, almost sufficient in itself for the purposes mentioned. His lectures on chemistry and geology are more full and scientific in their character. The works of Liebig, and numerous other writers on scientific agriculture, may be studied by the intelligent farmer with great advantage.

We know of no person in this country qualified to give lectures, and illustrate them by experiments, except Mr. Buckland. Professor Crofts, (of the University,) is, we believe, a first-rate analytical chemist, and if we were anxious to know the constituent elements of our soil, we should prefer sending a portion to him to be analyzed with scientific accuracy. Mr. Buckland studied under Professor Johnston, the best agricultural chemist of his day, and might, we dare say, be engaged to deliver a course of lectures to any club or society that would pay a reasonable remuneration.

An apparatus sufficient to perform all the experiments mentioned in Johnston's Catechism, may be had in Albany, N. Y., for about four dollars. We are not aware that any thing additional would be required, except perhaps a few tests, to make an *unprofessional* examination of a piece of soil.

AGE OF POULTRY.—Farmers usually sell poultry alive, excepting in some part of the country, such as the Borders, where geese are killed and plucked for the sale of their feathers before being sent to market. Poulterers in town, on the other hand, kill and pluck all sorts of fowls for sale, so that the purchaser has it in his power to judge of the carcass; and if he buys an inferior article at a high price, it must be his own fault. It is easy to judge a plucked fowl, whether old or young, by the state of the legs. If a hen's spur is hard, and the scale of the legs rough, she is old; whether you see the head or not; but the head will corroborate your observation, if the under bill is so stiff that you cannot bend it down, and the comb thick and rough. A young hen has only the rudiments of spurs, the scales of the legs smooth, glossy, and flesh colored, whatever the color may be, the claws tender and short, under bill soft, and the comb thin and smooth. An old hen turkey has rough scales on the legs, callosities on the soles of the feet, and long, strong claws; a young one to the reverse of all these marks. When the feathers are on, the old turkey-cock has a long beard, a young one but a sproutling one; and when they are off, the smooth scales on the legs decide the point besides difference in size in the wattles of the neck and in the elastic shot upon the nose. An old goose, when alive, is known by the roughness of the legs, the strength of the wings, particularly at the pinions, the thickness and strength of the bill, and the firmness and thickness of the feathers; and when plucked, by the legs, pinions and bill, the coarseness of the skin. Ducks are distinguished by the same means, but there is this difference, that a duckling's bill is much longer in proportion to the breadth of his head than that of an old duck. The young pigeon is discovered by its pale colored, smooth scales, tender, collapsed feet, and yellow long down interspersed among the feathers. A pigeon that can fly has always red colored legs and no down, and is then too old for use.

AGRICULTURAL COLLEGE AND EXPERIMENTAL FARM.

We are pleased to receive such marks of approval of the movement to which we have endeavoured to give an impulse, in the last two or three numbers of our journal, as are to be found in the communcation below. It will be seen that our correspondent is in favour of a leading principle of our scheme as propounded in our last number—a joint stock company:

Whitchurch, March 12th, 1848.

MR. EDITOR:—

I read with much interest in a late number of the *Agriculturist,* the able communication on the above important subject, from the pen of George Buckland, Esq The farmers of Canada owe that gentleman a debt of gratitude, for the zeal he most nobly manifests in the cause of agricultural improvement. and in my opinion, they will be neglecting their best interests if they do not unite their efforts in establishing and sustaining an institution, having for its object the noble and patriotic purposes pointed out by Mr. B. An educational institution of this kind has for some time attracted public attention in this country, and it appears strange, that, among a people so purely agricultural, so little should have been done towards its establishment. About six years ago, the farmers of this and the adjoining townships made an attempt to establish an Agricultural College; and if ordinary prudence and good management had been observed, by those who took the most prominent part in the matter, that institution would have been in most successful operation, and produced much good to the country. Nearly £3,000 were subscribed, and a very lively interest was manifested by many of our best and most substantial farmers, who attended the meetings and expressed a willingness to contribute a portion of their means and influence, in establishing a college in connection with a well-conducted experimental farm. Four hundred acres of land were bought for the purpose, but the person who was commissioned to enter into a treaty for the land, betrayed the confidence that was placed in him, and in the operation turned a land jobber, and pocketed a very considerable sum This fact soon became known, dissatisfaction followed, a public meeting was called. and a thorough *expose* was made, and in short the whole fabric fell to the ground. I need scarcely add, that those who took a prominent part in this matter, are still of opinion, that under proper management, educational institutions such as have been so ably and fully described by your correspondent Mr. B., would tend much to develope the agricultural resources of this province, and likewise be a means of arousing the latent talents of the youth of our agricultural districts, enabling them the better to perform with credit, the duties which devolve upon them as agriculturists and citizens of this young and flourishing colony. As a plain practical farmer, and one too, who is anxious to aid in establishing, at least, one superior educational institution, upon a broad and scientific basis, for the education of my sons, with a view of making them intelligent practical farmers. I read with much interest, the warm and patriotic appeal, made by Mr. Buckland, to the agriculturists of Canada, and I heartily trust, that efficient measures will be adopted to second such noble efforts. Although I do not profess to be as well informed upon these matters, as are, doubtless, many of your readers and correspondents, still in order that "public opinion may be fairly tested in reference to the objects" so happily expressed by Mr. Buckland. I shall crave your indulgence, and that of your numerous readers, whilst I submit without further preface my own views regarding the mode in which such an enterprize should be undertaken, and the character of the institution so much required in this country Although government aid is desirable in all matters, of a purely public nature, still I hold that the movement under consideration is of too great and too pressing a nature to be entrusted entirely to the action, and in the hands of government. I would therefore suggest the propriety of immediate steps being taken by those who are directly interested in the matter. And of the various ways in which such an enterprize may be undertaken, probably the one of organizing a joint stock company, for the purpose of realising funds, and for concentrating support and influence from various parts of the province, is, on the whole, the most feasible and practicable. I would therefore suggest that meetings be called without delay in various parts of the province, to consider the question, and when the public mind has become well prepared for the movement, a stock book might be opened, and collectors sent out to procure the subscription of those who are friendly to such a national enterprize. The shares should not be over £12 10s. each. An instalment of £2 10s. per share, would most likely be required soon after the stock was taken up. for the purpose of purchasing and stocking the farm, after which other instalments would be soon required for the erection of suitable and commodious buildings for superintendents, teachers, pupils, and workshops, &c., and for the purchase of philosophical apparatus, to illustrate the various branches that would be required to be taught at such a school. The capital to carry out an enterprise of this kind, upon a liberal and enlightened scale, would necessarily, be very considerable; £10,000 would be sufficient for the easy accomplishment of the objects contemplated. When once established under the management of a proper Board of Directors with efficient teachers and overseers, such an institution might, with tuition fees,

and the labour of the pupils, be made to maintain itself; as proof of which, I might if it were necessary, adduce strong evidence from Germany and other countries in Europe, where Agricultural Educational Institutions have become soundly established. Pupils at agricultural schools might with advantage to themselves and to the institution, labour from 5 to 6 hours a day, and about the same time might be spent in the study and class room.

At such an institution, the very best description of machinery for Agricultural purposes, should be employed, and in the winter months the pupils should be taught to construct the implements required for their own use. The various improved breeds of stock, together with the improved varieties of seeds, roots, fruits, and the best mode of crossing and cultivation, would become familiar topics with the pupils. But why should I occupy your valuable space with dilating upon this very important subject, when it has been already so clearly portrayed to your readers by Mr. Buckland. I trust you will pardon me for thus intruding myself upon your attention, and the only apology I can make is, that I, as a practical farmer, am desirous of educating my sons at such a school as Mr. B. came out to establish; and to support the enterprize, I am willing to subscribe my mite.

Yours, &c.

A WHITCHURCH FARMER.

ROYAL AGRICULTURAL SOCIETY OF PRINCE EDWARD'S ISLAND.

We have received a copy of the Annual Report of this Society for 1847, from which we learn some important facts with regard to the state of agriculture in that Island. The Society appears to be in a flourishing state, judging from the number and respectability of its members. His Excellency Sir Donald Campbell, Governor, is Vice-Patron, and Prince Albert, Patron of the Society. William Douse, Esq., M. P. P., is re-elected President for 1848. The Treasurer's statement shows a balance on hand in the shape of stock, debts, and money, to the value of £508 6s. 1d.

The report states that rust is the great evil of the wheat crop; and that the produce of this important article has been reduced "to less than two-thirds of the average crop of grain, whilst the straw is considerably injured." The Committee state, that "they are decidedly of opinion that the culture of wheat, either from our not possessing the sorts best suited to our local circumstances, some error of system, or other latent cause, is not carried by us to the perfection of which we hope it may yet be susceptible, for they cannot see, in the circumstances of the climate, any reason why the average produce of this Island should be so far below that of the Canadas. In regard to rust, it has been suggested that it might be worthy of experiment to ascertain whether, if wheat were grown without clover and grass seeds, the liability to that disorder might not be less in consequence of there being less probability of moisture remaining about the stalks of the plant. It is a matter which it would be well to test by experiment, more particularly as in Great Britain grasses are seldom sown with a wheat crop."

With regard to potatoes, they remark that "it does not appear that scientific persons either in Europe or elsewhere, have yet discovered the cause of the disease with which they are still possessed. There is a variation, however, very perceptible in its consequences as relates to their growth amongst ourselves; whilst fewer have been actually rotted, and those taken up have resisted decay better than in 1846, yet the produce and size seem to diminish so much, that considerable doubts may be entertained whether the existing disorder does not effect the propagation of the plant."

After remarking on the improvement that is observable in their sheep and pigs throughout the Island, the Committee make the following statement, regarding a new vegetable that has excited some attention lately in England, viz, the Khol Rabi. We have not yet heard of its introduction into Canada. "The Khol Rabi is grown with great facility, and being transplanted from a seed bed, is not subject to the fly; taking this circumstance into consideration, it is probable that the average weight grown on a given space would, in many seasons be equal to turnips—they stand the winter equally well or better; and some which were left under the snow the whole winter, by way of experiment, did not rot or decay. For winter dairy cows they might be very useful, as they do not affect the taste of the milk; and the leaves in the autumn, before taking up the roots, afford a large quantity of food. It is a very good table vegetable, and a certain garden crop."

The Committee complain of the one shilling per quarter duty levied on colonial wheat, remarking, that "though thought small in Great Britain, it is an incubus on our industry, and its imposition contradictory to the principles on which the Home Government professes to act; and, small as it may appear, is a reduction in the returns of £6 5s. per 1000 bushels."

We join with them in demurring to this imposition, and trust, small though it be, that it will speedily be removed.

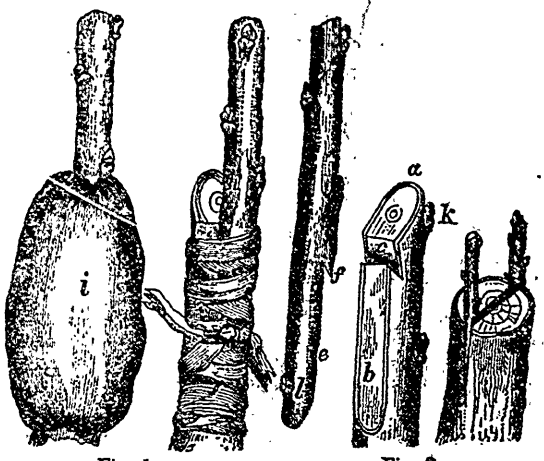


Fig. 1. Fig. 2.

GRAFTING.

A subscriber has requested us to inform him as to the best mode of grafting, and the proper time for doing it. Another asks us to state the ingredients used in making good grafting wax. We are much obliged to them for thus reminding us of what may be interesting at this season to many of our readers. We believe we have access to the best authorities on the subject. The above cuts, and the information which follows, are taken chiefly from Mr. Downing's celebrated work, the "Fruits and Fruit Trees of America."

The proper time for grafting fruit trees is in the Spring, as soon as the sap is in motion, which commences earliest with the Cherry and Plum, and ends with the Pear and Apple. The precise time of course varies with the season and the climate, but is generally comprised from February to the middle of April. The most favorable weather for grafting is a mild atmosphere with occasional showers.

The scions are generally selected previously; as it is found in nearly all kinds of grafting by scions, that success is more complete when the stock upon which they are placed is a little more advanced —the sap in a more active state than in the scions. To secure this, we usually cut the scions very early in the spring, during winter, or even in the autumn, burying their lower ends in the ground in a shaded place, or keeping them in fine soil in the cellar till wanted for use. In cutting scions, we choose straight thrifty shoots of the last year's growth, which may remain entire until we commence grafting, when they may be cut into scions of three or four buds each. In selecting scions from old trees it is always advisable to choose the most vigorous of the last year's shoot growing near the centre or top of the tree. Scions form unhealthy branches should be rejected, as they are apt to carry with them this feeble and sickly state. Scions taken from the lower bearing branches will produce fruit soonest, but they will not afford trees of so handsome a shape, or so vigorous a growth, as those taken from the thrifty, upright shoots near the centre or top of the tree.

The stock for grafting upon, is generally a tree which has been standing, at least for a year previously, on the spot where it is grafted, as success is much less certain on newly moved trees. In the case, however, of very small trees or stocks, which are grafted below the

surface of the ground, as is frequently the practice with the Apple in American nurseries, the stocks are grafted in the house in winter, or early in spring, put away carefully in a damp cellar, and planted out in spring; but this method is only successful when the root is small, and when the top of the stock is taken off, and the whole root is devoted to supplying the graft with nourishment.

The theory of grafting is based on the power of union between the young tissues, or organizable matter of growing wood. When the parts are placed nicely in contact, the ascending sap of the stock passes into and sustains life in the scion; the buds of the latter, excited by this supply of sap and the warmth of the season, begin to elaborate and send down woody matter, which passing through the newly granulated substance of the parts in contact, unites the graft firmly with the stock.

The two more common modes of grafting are called *Tongue-grafting*, (fig. 1,) and *Cleft grafting*, (fig. 2.) The following with the aid of the cuts, will give a good idea of the first mode:—

Having chosen your stock of the proper size, cut it off at the point where, *a*, it appears best to fix the graft. If the stock is quite small, it may be within three or four inches of the ground. Then, with a very sharp knife, make a smooth cut upwards, *b*, about two inches in length. Next make a slit, from the top of this cut about one-fourth of the way downwards, *c*, taking out a thin tongue of wood. Cut the scion four or five inches long, or so as to have three buds; then shape the lower end with a single smooth sloping cut, *e*, about the same length as that on the stock, and make the tongue upwards *f*, to fit in the downward slit of the stock. Now apply the scion accurately to the stock making the *inner bark of the scion fit exactly the inner bark of the stock, at least on one side.* Without changing their position, tie them together carefully with a piece of bass-matting, or tape *h*. And finally cover the wound with well prepared grafting-clay or wax, *i*. This ball of clay should more than cover the union, by an inch above and below, and should be about an inch thick. If grafting wax is used, the covering need not be above half an inch thick.

In a month's time, if the graft has taken, it will be expanding its leaves and sending out shoots. It will then be necessary to rub or cut off all shoots between the ball and the ground, if it is a small stock, or all those which would rob it of a principal share of nourishment, if upon a large tree. If the scion or stock is very weak, it is usual to leave one or two other buds for a time, to assist in drawing up the sap. About the middle of July, after a rainy day, you may remove the ball of clay, and, if the graft is securely united, also the bandage; and the angle left at the top of the stock, *a*, should now be cut off smoothly, in order to allow the bark of the stock and the scion to heal neatly over the whole wound.

Though it is little attended to in common practice, the amateur will be glad to know that the success of a graft is always greatly insured by choosing the parts so that a bud is left near the top of the stock, *k*, and another near the bottom of the scion, *l*.

Cleft grafting is a very easy though rather clumsy mode, and is in more common use than any other in the United States. It is chiefly practiced on large stocks, or trees the branches of which have been headed back, and are too large for tongue-grafting. The head of the stock is first cut over horizontally with the saw, and smoothed with a knife. A cleft about two inches deep is then made in the stock with a hammer and splitting knife. The scion is now prepared, by sloping its lower end in the form of a wedge about an inch and a half long, leaving it a little thicker on the outer edge. Opening the cleft with the splitting-knife, or a small chisel for that purpose, push the scion carefully down to its place, fitting its inner bark on one side to that of one side of the stock. When the stock is large, it is usual to insert two scions, fig. 2. On withdrawing the chisel, the cleft closes firmly on the scions, when the graft is tied and clayed in the usual manner.

Grafting clay is prepared by mixing one-third horse-dung, free from straw, and two-thirds clay, or clayey loam, with a little hair, like that used in plaster, to prevent its cracking. Beat and temper it for two or three days, until it is thoroughly incorporated. When used, it should be of such a consistency as to be easily put on and shaped with the hands.

Grafting wax of excellent quality we have made by melting together three parts of bees-wax, three parts of rosin, and two parts of tallow. While yet warm it may be worked with the aid of a little water, like shoemaker's wax, by the hand. The common grafting wax of the French gardeners is of two kinds. The first is melted and laid on with a brush in a fluid state, and is made of half a pound of pitch, half a pound of bees-wax, and a pound of cow-dung, boiled together. The second, which is spread while warm on strips of coarse cotton, or strong paper, and wrapped directly about the graft, answering at once to tie and protect it, is composed of equal parts of bees-wax, turpentine, and rosin. The grafting wax most commonly used here is made of tallow, bees-wax, and rosin, in equal parts, or, as many prefer, with a little more tallow to render it pliable.

Grafting wax is a much neater and perfect protection than grafting clay, but the trifling cost of the later, where a great deal of work is to be done, accounts for its greater use by nurserymen, and gardeners generally.

HINTS FOR APRIL.

We copy the following "hints" from that popular monthly the *Genesee Farmer*:—

Now begins the battle of life, in which the tiller of the soil has to marshal his host, and commence the onset for the means of existence—against frost and hail, storm and wind, insects, birds and beasts. Winter's icy fingers now begin to relax their hold, and the howling blast is subdued to the gentle wing zephyrs. The sombre tints of the field and the gray haze of the forest blush into rosate hues, and all inanimate nature puts on the robes of beauty and gladness. Humanity starts from its drowsy period of hybernation, and awakes with all organic life—entering the lists for the blessings of heaven with a joyful hope, that the laborer's toil shall not be unrewarded. Blessings, saith the preacher, only come by means, and the price of success is eternal vigilance, industry and economy. So hearken to the words of the Prompter, whose head is whitened by the bleaching suns and snows of sixty summers and winters.

See that your stock is kept in good heart this month, above all periods, particularly your oxen, horses, and in-coming cows; don't begrudge them an ear of corn a day, nor salt to give them an appetite. Sow your clover and grass seed before the spring frosts are past, and plaster the young clover at any time after it is up, when the weather is so dry that men say "a good shower would do a deal of good." Look to and regulate the fences; stake and rider, or stake and yoke them, which is preferable, as it saves land and hindrance. Time is money—so down with the *bars*, and up with the *gates*.

See that the wheat fields are properly drained, and, if hove out by frost, roll them down the moment the soil is dry enough. Make the yard manure into heaps, before the drenching rains send its virtues to the tombs of the Capulets; and don't draw it on to plowed land, until you want to use it. If for top dressing old meadows, do it at any time, giving a thorough harrowing with a double team; it not only loosens the hide bound turf, but allows the grass seeds of the manure, to catch and renew.

Cut up and house your fire wood; one cord seasoned under cover is worth two in the weather.

See for the last time, that every implement is in order and in its place; harness sound and well oiled, plows, harrows and trimmings repaired, and ready for work. The moment the soil and weather are favorable, put in oats, barley, spring wheat and peas.

Plant some variety of the potato, by the middle of the month for family use, and to prevent disease—this is the only specific—the Mercer or Meshanic, Early June, Ash-leaved, Kidney, &c. Plant with from one to two inches of earth, and as soon as they break ground, throw on half a shovel of fresh manure and cover with about the same depth of soil. This process is the *ne plus ultra* of potato cultivation. Sow some lettuce in a warm exposure the moment the frost is out of the ground. Onions cannot be sown too early—neither carrots and parsnips.

If you have not trimmed your grape vines, do it immediately, and cut away all the last year's wood, to from three to five eyes, and thin out thoroughly. Never mind the bleeding; in garden culture a little depletion does them good; the greatest trouble is a redundancy of new wood and foliage.

Now my young reader—for it is no use to talk to the old coveys, who know it all, and don't believe any thing they read but their Bibles, and that sometimes is a mooted point;—I say young reader arm yourself for the conflict. A good beginning makes a good ending.

HEMP AND FLAX GROWING.—The season for sowing flax and hemp is now at hand, and therefore a few hints upon the proper management of the soil for these crops, may be acceptable to some of our readers. Both these crops require a very deep, rich soil. The quantity of seed for a flax crop, should in no case be less than two bushels per acre, when the lint is of equal importance to the seed; and for a good quality of hemp, an equal quantity of seed is required; but for the latter crop, the seed, if allowed to ripen, will seriously injure the fibre, as the plants are sexual and do not come to maturity at the same period. A rich vegetable mould, with a permeable subsoil, is the best quality of soil for both hemp and flax; and as soil of this quality is very abundant in Canada, and as those are also found to be excellent preparative crops for fall wheat, thus doing away to some extent the necessity of making naked summer fallows, it is to be hoped that more attention will be paid to their cultivation than has been heretofore the case. A market is now established for both the seed and fibre of these plants, in this city, through the enterprise of Messrs. Dew and McGee; and we heartily wish that the farmers of this and the adjoining Districts, will have sufficient enterprise to back up these laudable efforts. Both these gentlemen are practically acquainted with the manufacture of the seed into oil, and also the preparation of the fibre for market, and likewise its manufacture into linens and cordage. F.

CIVIL AND SOCIAL.

THE CURRENCY AND BANKING.

If the currency of a country consisted wholly of gold and silver or any other substance of which the intrinsic and nominal value are identical, sudden, unnatural, or excessive expansions of the currency would be impossible. In such case, there would be little danger of allowing any individual to increase the currency to the extent of the the weight of currency metal of which he might become the possessor. An ounce of gold is not really more valuable for being divided into several pieces, each bearing the impress of a national emblem. Still, to insure the purity of the currency, the state might be justified in refusing to permit individuals circulating as current coin small pieces of unstamped gold and silver. But such a restraint on individuals would not contract the national currency; for those possessing gold and silver not stamped as current coin, would exchange it at the government mint for gold and silver that had received the impress of legal currency. And on the other hand, if individuals were allowed to pass as current coin pieces of unstamped gold and silver, they could not thereby inflate the currency. A metallic currency would not be a *manageable* currency: it would defy the controul alike of governments, cliques, or individuals. We have no desire to push the argument to the extent of favouring an exclusive metallic currency, which would probably be too contracted for the purposes of most, if not all countries. We only wish to show that being *real*, a metallic currency, could not produce those evils which constantly flow from the frauds and trickery resorted to by the managers of a paper or *artificial* currency. The giving to individuals or companies, the right to manufacture, almost without any check, this artificial currency, is to give to cunning, fraud, and idleness, the advantages of the command of capital and labour, for which no equivalent is given in return. It is to invest nonentity with the attributes of strength; to give to a phantom without substance—a mere ghost—the power to rule living veritable men, and to change at pleasure the value of their labour and property. If the strength with which this nonentity becomes invested, were exercised for the benefit of the community at large, some general advantage might be derived from its employment. But when it is used to forward private interests to the detriment of the general interest, it resembles the character of confederated gangs of a species of national highwaymen, whose plundering propensities lead them to make war upon every man whose labour contributes to the national wealth. It would be the business of a good government to arrest these gangs of idlers and place them in a position of safety where they will support themselves by their own labour, and at the same time, assist in augmenting the national wealth.

The practical question of putting an end to the abuses growing out of our present system of banking, is not whether paper shall cease to form a part of the currency of the country or not, but what are the cheeks under which it shall be issued? Shall the profits which arise from its circulation, to the issuers, go into the pockets of private speculators or into the public chest? Shall individuals any longer have a right to controul the national currency, by almost unlimited issues of paper money? These are the questions which, sooner or later, must engage the deliberations of the legislature. If the right of augmenting the currency of the country, by artificial means, is to be given to individuals, even-handed justice requires that there be no favouritism in the bestowal of that right: every man who has done nothing to forfeit the rights of citizenship, must be placed upon an equal footing, in this respect.

The exercise of this right implies compliance with certain uniform and settled rules. The whole paper currency of the country must either be issued under the controul of the government, on the credit of the province, or in other words, on the security of the taxes, or banking must be made free, as it has been for some time in the state of New York. If the latter plan be adopted, the issues of paper should be made under stringent regulations, similar to those mentioned in our last. Individuals or banking companies should have no power to controul the currency of the country, to the detriment of those who have not the inclination or the means to become bankers.

Whether the State is not entitled *to* the profits arising from the circulation of the artificial portion of the national currency, is a question which men are beginning to propound and debate with uncommon interest. It is a question which gives room to an infinite variety of speculations and opinions. It is of great importance that it should be thoroughly debated, before the government or the legislature take any action with reference to it.

We find that we have exhausted our space, and as this is not a question to be disposed of without grave deliberation, we must reserve our remarks upon it till another occasion.

USURY LAWS.

We have always held, since we gave a thought to the subject, that the Usury laws were a curse to this country; that they have been a great cause of the scarcity of money; that their continuance, under our present monetary difficulties, but aggravate the distress, and that it is the duty of our legislators to turn their attention to the consideration of their removal, without delay. We are glad to observe that a movement has been made in the House of Assembly, in the right direction; but it stops at the very point where substantial good may be done. It is proposed to suspend the operation of these laws in the case of traders, merchants, speculators, and mere men of straw; but when men of property, farmers, and those who can give good security, wish to borrow, they are to be restricted! *they* shall not give more than 6 per cent, and if they can't get money for that, which will then be more difficult than now, they must go without!! The Bill is, we believe, nearly a copy of the English Act, but the circumstances of the landowners and merchants of the two countries, are entirely different. We will show this at another time. We make room here for the following pungent remarks of a city contemporary:

We hold, that that country is the richest, in which money can be turned to the best account. We hold that Canada is a rich country, because it is a country in which any man, with a good pair of hands, and a clear head, cannot fail to find good value for his money; and we assert, that those who make the obtainment of money difficult, and expensive, are the greatest dead weights which could be placed upon the general prosperity of the country. Such dead weights, beyond all controversy, are the upholders of our Usury Laws; and every man who lends a helping hand in removing them, we look upon as a friend to the best interests of the community.

It is high time that our legislators should bring to the discussion of this question, some more convincing arguments, than their stereotyped, "I think so and so," and "my conviction such and such." It is high time, that they should be called upon for more cogent proofs of the excellencies of their antiquated theory, than the barbaric practice of the feudal ages. It is time that they should come to the consideration of so important a measure, well matured by sober, and extensive, investigation; rather than that they should year after year, approach it with the same unchanged vacuito of thought,—the same inflexible stubbornness of easy prejudice, and leave it, as they do, besmeared with a depth of exposed ignorance, which none but intellectual Hottentots could rejoice in. We trust Mr. Sherwood will stick to his ship. He is no political pet of ours; but let him fire into them, and if he stands in need of hot shot, we shall never say no to the bellows. We cannot, however, close this article, without pointing out one capital fault in Mr. Sherwood's Bill. We allude to the following anomalous proviso:

"Provided always, that nothing herein contained shall extend to the loan or forfeiture of any money upon security of any lands, tenements, or hereditaments, or any estate, or interest therein."

Mr. Sherwood has shown, by this *proviso*, that he is only, after all, a mere quack. He does not understand one jot of the real state of his patient. He is just like the vender of a patent medicine. He has picked up a profitable article of trade, and he thinks he may, at all events, contrive to make it pay, whether his patient recovers or not. He must come to school. He has much to learn on many things; and manifestly, no little on the very subject under discussion. Why, we ask, make money an article of Free Trade to all except those who have the very field in which to trade with it? Why make the loaning of money by the merchant free of the restrictions of the Usury Laws, and leave these restrictions still, as a nightmare, upon the Agricultural class? This will be to force money into unnatural, dangerous, and unprofitable channels. It will be, to tempt those to borrow, at usurious rates, whose profits do not, now, sustain the fixed legal rate; whilst it will prevent from borrowing, at *any rate*, those whose profits would enable them to pay usurious rates. It will be to say to the owner of 200 acres, or 500 of good, improved, and improvable land, you shall not be released from the pernicious influence of the Usury Laws—you shall not pledge your property for borrowed money, though you have the safest and most productive field of invest-

ment, in which to employ it,—and though your so employing it cannot fail to advantage yourself, and to augment the general wealth of the country; whilst it will say to the man of straw,—the penniless retailer of bobbin and bulls-eyes,—"you, Sir, have been cared for,—you are free to borrow at any rate you please to offer;—to buy goods at any amount you can, and agree to give your creditors any rate of interest they choose to ask: you are a non-producer, therefore *you* shall be encouraged in your extravagance, and sent to the devil, or the Bankrupt Court, as fast as possible. If you buy largely, the wholesale merchants will import more largely; and money will be made plenty in the country, by being swept out of it as fast as possible."

LITERATURE.

THE GYPSY CHILD.

BY ELIZA COOK.

He sprung to life in a crazy tent,
Where the cold wind whistled through many a rent;
Rude was the voice and rough the hands
That soothed his wailings and swathed his bands.
No tissue of gold, no lawn was there,
His snowy robe for the new-born heir;
But the mother wept and the father smiled,
With heartfelt joy, o'er the gypsy child.

He grows like the young oak, healthy and broad,
With no home but the forest, no bed but the sward;
Half-naked he wades in the limped stream,
Or dances about in the scorching beam.
The dazzling glare of the banquet sheen
Has never fallen on him, I ween;
But fragments are spread, and the wood fire piled,
And sweet is the meal of the gypsy child.

He wanders at large, while maidens admire
His raven hair and his eyes of fire:
They mark his cheek's rich tawny hue,
With the deep carnation flushing through;
He laughs aloud, and they covet his teeth,
All pure and white as their own pearl wreath;
And the courtly dame and the damsel mild,
Will turn to gaze on the gypsy child.

Up with the sun, he is roving along,
Whistling to mimic the blackbird's song
He wanders at nightfall to startle the owl,
And his baying again to the watch-dog's howl.
His limbs are unshackled, his spirit is bold,
He is free from the evils of fashion and gold;
His dower is scant and his life is wild,
But kings might envy the gypsy child.

ROBINSON'S FOLLY.

A TALE OF A MODERN RUIN.

It has happened to me, in the course of my life, to wander pretty extensively through my native country, and to take up a temporary abode in many parts of it far distant from each other. A number of years ago, I was located for a season in the county of W——, where I had considerable difficulty in procuring a residence suitable to my resources and convenient for my calling. During the time of my uncertainty, I was fortunate in finding a home in the habitation of an old friend, who accompanied me in my frequent rambles in search of a more permanent dwelling-place than that of Woodsdale Farm. In the course of these researches, we on one occasion turned our steps towards a house which my friend Hardcastle informed me had been many years uninhabited, which he had once visited in the days of his youth, before its glory was departed, and which he desired once more to see in its premature decay. It was not a dwelling to my taste and purpose, however, and having almost in silence paced through its damp apartments, and taken note of the tattered condition of its internal decorations, and the delapidations of its exterior, we took our departure. There is nothing in the way of edifices more mournful than a modern ruin. The place we had just left had not been erected sixty years; it had been built with all due regard to stability, and yet its walls were mouldering through sheer neglect, its floors rotting, and an unwholesome atmosphere gendering in every part of it from cellar to attic. It had been, my friend informed me, untenanted and unrepaired for a quarter of a century; a term of neglect sufficiently long to account for all the desolation we had witnessed.

'The house has a history, if it could be known,' I said, as we walked down the grass-grown carriage-road.

'It has; and if you have any curiosity to hear it, I will give you the particulars during our walk homewards.' Here is the story.

About seven years ago, the little town of H—— boasted of three tradesmen who from small beginnings had risen step by step to the reputation of some wealth, and, consequently, to considerable local importance. They were named Jones, Brown, and Robinson. Jones was a bachelor of middle age at the time my story commences; Brown was a married man of more mature years, but without a family; and Robinson, a younger man than either of his friends (for friends they were), was a widower, and the father of a little boy. At this time the household of Mr. Brown received an accession in the person of a little girl about seven years old. She had arrived in England under the care of the captain of an East Indiaman, and had been forwarded, according to directions, to the town of H—— and the house of her future protector. The features and complexion of this child sufficiently proclaimed her origin. India had evidently other claims upon her than such as arose from the mere accident of its being the country of her birth; she was a mulatto. Who her parents were, or rather who was her father—why she had been thus early and solitary banished from her native land—and why, above all things, she had been committed to the charge of a petty drysalter (for such was Mr. Brown's calling) in an obscure provincial town—these were questions which every body in H—— began to ask of each other, but which no one could answer. In time, however, the mystery came out, and then it was discovered that there was not much mystery in the matter. It was a sort of transaction, perhaps more common in the last century than the present, but which may yet find its parallel.

The girl's name was Blanche Wilson. Why called Blanche it would be hard to say, excepting the parents have strange whims in the naming of their children, but when it was discovered that the name of the young lady was Wilson, it was remembered that the now elderly Mrs. Brown (then Mary Arnold) had a far-off cousin whose name was Wilson, who sometimes paid a visit from London to H——, to the no small annoyance of the more sedate Brown. But these occasional visits were discontinued, and Mary Arnold was fain to put up with the drysalter. When inquiries were instituted as to the fate of cousin Wilson, the young lady shook her head, heaving a gentle sigh, and pronounced the awful dissyllable 'India.' The child, then, for Mrs Brown made no scruple of avowing the fact, was the daughter of cousin Wilson; and this accounted for her location under the drysalter's roof.

The history of Blanche's father was a not uncommon one for those days of sicca rupees and nabobism. Sent to India when young, to push his fortunes there by the aid of recommendatory letters to one or two persons of influence in Calcutta, he had, first of all, obtained a trifling appointment in the civil government. By his own industry, aided, there is but little doubt, by a certain degree of unscrupulosity, he had rendered himself necessary to the high powers, and was soon on the road to nabobical wealth. Meantime, the few friends whom he left behind him in England died off one by one, until his distant cousin, Mrs. Brown, was the only living tie to his native country.—By all accounts, Wilson was fond enough of the little girl, but her presence was an inconvenience; so under pretext of a regard for her education, he had shipped her to England, trusting that, when she arrived there, his relation, Mrs. Brown, would, for a handsome remuneration in hand, and in consideration of future hopes held out to her, take charge of the child. This was the substance of a letter which Mrs. Brown showed to her friends, in which it was also hinted that, ten years hence or thereabout, Mr. Wilson himself intended to return to England, to enjoy the fortune he should by that time have secured. Mrs. Brown was by no means dissatisfied with the charge which was thus somewhat unceremoniously thrust upon her. Neither was the drysalter himself. The girl, it is true, was no great beauty, to English eyes, at least, but she was a sweet tempered child. And when it is remembered that Brown had no children, it is not wonderful that such an inmate was rather an agreeable acquisition, especially considering that she did not come (as the little Browns, had there been any, must have come) empty handed.

After the arrival of little Blanche, the circumstances of the Browns were materially improved. New apartments were added to the rear of their dwelling; new furniture was imported; silks and satins glistened on the portly figure of the drysalter's wife, usurping the reign of modest gingham. People shook their heads at these changes, but the Browns themselves were unmoved by the envy or whatever else it might be of their neighbours. Let them laugh that win,' said the drysalter.

In due time Blanche was sent to a London boarding-school, spending only her vacations at H——. Five years thus passed away, and Blanche had not yet completed her education, as it is termed, when the doors of Brown's house opened to another visitor. This was no other than Mr. Wilson himself. His intentions and expectations had been frustrated. Very far from having returned to England to enjoy the remainder of his life in ease and luxury, he had evidently come back merely to die. Mr. Wilson lived only a few months after his return. During this time the house of Mr. Brown was his home, and Blanche was his constant attendant. He formed no new acquaintance, paid and received no visits, shut himself up much in his own apartments, was querulous and exacting with all around him, moody in solitude, and would see neither physician nor minister. Previous to his death he sent for a lawyer, made his will and paid over a large sum of money to the corporation of H—— to be given away in charity. The funeral was so sumptuous as to excite the wonder of the

whole neighbourhood, though poor Blanche was the only one who really mourned his departure; but the contents of his will were still more to be wondered at. The whole of his accumulated wealth, with the exception of a tolerably handsome bequest to his cousin Mrs. Browne, was left to Brown and his two friends, Jones and Robinson, in trust for the orphan Blanche until she came of age. These executors were by the will also constituted the guardians of the poor child; and a clause in that will declared the whole property forfeited to the executors should Blanche marry under age without their joint consent Should she die before arriving at the age of twenty-one, her guardians were in like manner to inherit her wealth. Why the dying man fixed upon the two men, Jones and Robinson, as joint executors with Brown, could only be accounted for by his rigid seclusion from society after his return to England, and by the supposed recommendation of the drysalter.

After her father's death, Blanche returned to school, where she remained some four or five years. Meanwhile the proceedings of the three legal guardians had not been altogether unmarked. From industrious tradesmen they had become the managers of their little town; speculated largely in houses and lands, adding house to house and field to field; projected a manufactory in the neighbourhood, which flourished for a time but is now fallen into decay. In short the wealth of the young heiress, whether justly employed or not, was evidently not suffered to lie idle; and though there were not wanting some who made ill-natured remarks, on the whole, Jones, Brown and Robinson, were looked upon as men who knew well how to look to the main chance, and were reverenced accordingly. Shortly after the return of Blanche from school, her only female friend, almost the only female acquaintance in H——, rather suddenly died, and the poor girl was thus left to the sole protection of three worldly-minded men. Whether at this time they deserved any harsher appelative I cannot say. It certainly was broadly stated, years afterwards, that the death of Mrs. Brown was occasioned by deep-rooted grief. It was recollected how care-worn and haggard her once broad and laughter-loving countenance had become ere she died; how averse she had shown herself to money-making schemes of her husband; how her dislike had more than once been openly manifested to his inseparable associates Jones and Robinson, and now, when death was rapidly approaching, she had wept and sobbed over poor Blanche, and spoken in mysterious words and agonizing tones, of some much dreaded evil to come. At the death of Mrs. Brown, Blanche, then about eighteen, was invited, or rather required, to take the superintendence of the drysalter's household; and her situation was altogether as undesirable a one as may well be imagined

Fitted by superior education for society of a different class than that in which she was placed, she was little inclined to form friendships with those around her. On the other hand, the stigma of her birth, and her domestication in the house of a tradesman, effectually barred any intercourse with the few families of good birth and property in the neighbourhood. Nevertheless, the report of her wealth and expectations, was not without effect. Suiters made proposals of marriage, but they were summarily dismissed either by herself or her guardians. One only appeared to have made any impression upon the young lady herself, or to threaten to the watchful guardians any thing like pertinacity in his advances. This was a young tradesman of H——. Whether the money of Blanche was the attraction in this instance, I cannot say, but it is certain he contrived to win her over in his favor, and for some months to carry on a correspondence with her, unsuspected by the drysalter. At length the discovery was made, and, contrary to their expectations, Mr. Brown smiled graciously upon the abashed lovers. Gently chiding them for their attempted secrecy, he gave his full permission to the young man to visit his ward, and encouraged Blanche to receive him as her recognised future husband.—These were pleasant days to the hitherto solitary young lady, and for a few weeks the course of love seemed to run smooth. In due time the lover demanded his affianced bride in marriage, and preparations were made even to the ordering of the wedding cake and the fixing of the marriage day. At this juncture the bridegroom expectant received one evening a visit from an old schoolfellow and fellow-townsman I may as well say, continued Hardcastle, that this friend was my father, from whom I heard much of this story.

'So you are going to be married, Sam?" said my father.

"I am,' replied Sam; 'but I wonder you should have heard of it. It was to be kept a profound secret till it was over.'

'Oh!" continued the visitor; 'and pray whose wise scheme was this? Yours, or Blanche's, or Mr. Brown's?'

'Not mine,' answered the young fellow, laughingly; 'of course I do not care if all the world knows it; but Blanche tells me that her uncle (as she calls Mr. Brown) does not want a fuss made about it.'

'I dare say not,' said my father.

'Why, you know, I and Robinson are not exactly on good terms, and so'——

'And so continued my father, interrupting him, 'you are to be married without his knowledge. I see. But do you know what you are about? Have you ever seen old Willson's will? Has Blanche?'

'No,' replied the interrogated lover; 'I believe she has not, and I know I never have. But what then! Brown has told us all about it.'

'Has he! Is it any thing like this? said my father, taking a copy of the will from his pocket and putting it into Sam's hands.

Poor fellow, I have often heard my father describe what a picture of indignation and desperation he looked when he came to the fatal clause; how he rushed out of the room, out of the house, without speaking a word. My father waited a full half hour for the return of his friend; and then somewhat alarmed at his prolonged absence, hastened in search of him. He proceeded towards the house of the drysalter, and was about to knock at the door, when he heard the sound of approaching footsteps from within. The door opened and his friend appeared, Brown standing by with a light in hand. They were evidenly both flushed with recent dispute, but Sam was making strong efforts to be calm.

'Good night, Mr. Brown,' my father heard him say. 'You have used me badly, sir, and poor Blanche too; but you will not gain your purpose We can wait. We can wait two years, and then look to yourself.'

The door closed, and my father was recognised by his friend. 'Thank you, Hardcastle,' he said; 'you have saved poor Blanche and me from ruin. Brown is a villain, but we'll circumvent him yet.'

It was certainly a bold game that Brown and his co-executors had played; but, except for my father, it would have been successful. There is no doubt whatever that the marriage was to have been solemnised without their *joint consent*, and then, and not till then, the will was to have been produced and enforced to its very letter.

As it was the whole scheme was disconserted, and the dishonorable plotters were put to their shifts. It was true, for their peace and security that, in little more than two years, their control over the heiress would cease, and that then they would be required to render up an account of their stewardship It is equally true that they could not have given a satisfactory account of it. Many of their later speculations had been worse than unproductive, and, in the best of them, a large amount of capital was locked up, which could not, for many years, be withdrawn without a fearful sacrifice. Of course, the premature discovery of the base plot, which was to rob poor Blanche of her birthright, put an end to the wedding negociations; for Jones and Robinson, pretending ignorance of previous connection, and a downright disapproval of it, refused their consent, and neither Blanche nor her lover were so desperately set upon the immediate consummation of their engagement as to throw up all their worldly expectations. The wily guardians of the young orphan cooly set themselves to work —not, indeed, to repeat the web which had been ruthlessly broken through, but to weave a new one. To carry out their plans successfully, it was necessary for Blanche to be withdrawn from the near neighbourhood of her lover, and desirable that he should sink in her estimation. Accordingly, a very few days after the exposure, Mr. Brown and his ward were reported at absent from H——. Whither they had departed no one could guess. Sam's ruin was determined on, and unfortunately it was in power of his enemy Robinson to work it Those were the glorious days of imprisonment for debt, and within three months of his disappointment, poor Sam was incarcerated in the county jail at the suit of Robinson, who held a mortgage to which the name of the victim was attached; and such was the fury of his persecutors, that he shortly afterwards committed suicide.

This accomplished, other plans were ripening for destroying the happiness and securing the property of the orphan girl. Robinson had a son who was nearly of an age with Blanche. The guardians now tried to bring about a match between them, but, more honourable than his father, the young man refused to participate in the scheme, and, to avoid the reproaches to which he thus subjected himself, withdrew from his father's house, and was not heard of in H——, for many years Thus again frustrated, the unworthy guardians had recourse to a last effort, which proved too successful. Under the pretence of amusing his ward by change of scene, Brown had taken her from one gay place to another—from London to Cheltenham, from Cheltenham to Bath, and from Bath back again to Brighton—keeping up, at the same time, a constant correspondence with his two fellow-townsmen, and carefully guarding against any chance of communication between the young betrothed. Thus Blanche began to suspect her lover of mercenary indifference—an idea which Mr. Brown took care to encourage; and poor Sam, in the midst of his pecuniary distresses, was deprived of the consolation of knowing, and at length of believing, that Blanche was faithful and firm. Firm and faithful, however, Blanche, was while her confidence remained unshaken. But her credulity was imposed upon; and with constitutional rapidity her love changed almost to hatred. The opportunity was not lost; the train had, indeed, been long and carefully laid; before the paroxysm of jealous rage was over which succeeded the positive certainty, as she imagined, of her lover's infidelity, the elder Robinson made his appearance. How far the succeeding part of the drama—or I should rather say the tragedy—was compulsory, can never be known. It is enough to say, that in less than six months after the commencement of her wanderings from H——, the unfortunate Blanche Wilson returned the wife of her youngest guardian. It was the sudden news of this, that finding its way to the debtor side of the county prison, overturned the reason of poor Sam, and closed his life.

It is needless to say that each of the villanous guardians had, in this transaction, taken care of himself. As far as was ever known, they made an equal division of the poor girl's property, and settled down in their old quarters, and to their old pursuits.

But the tragedy was not yet ended. The miserable fate of her

former lover reached poor Blanche's ear, and she perceived too late, the plots by which she had been hopelessly entangled. The effect was fearful. Madness of the most desparate character claimed her as its own. It became absolutely necessary to remove her to an asylum, where she remained for years a confirmed and violent maniac, until death released her from her sufferings.

Brown and Jones now disposed of their business, and removed to a town in the next county, while Robinson, whose trade was a builder, with his share of the plunder, busied himself in planing and building the mansion we have just visited. Having completed it, he also finally left H——; and the only connection kept up with that town hereafter, by either of the three men, was through the medium of an agent, who, it was generally supposed, eventually fleeced his clients to a large amount. But retribution of a far different character was shortly to overtake the miserable sinners. A few years after their removal from H——, Jones, who throughout the whole affair had been the tool of his more active associates, though he shared their crime and their reward was taken ill, and evidently lay on his bed of death. Then his conscience, which he hitherto managed to stifle, began to affright him with horrible remembrances of the past and anticipations of the future. His mental sufferings, by all accounts, were most poignant. On one occasion, when life was apparently at almost the last gasp, he despatched a messenger for his old companion Brown. The messenger returned, charged with an excuse.

'Are we alone?' asked Jones, rousing himself from his approaching stupor, and rolling his glassy eyes around him. 'Leave the room,' he shouted to his nurse who was standing by; 'leave the room, I must see Mr. Brown alone.'

The nurse obeyed. . . . . A quarter of an hour—half-an-hour—an hour elapsed; and muttered tones, deep groanings, hysterical shrieks, by turns were heard from that awful chamber. At length the door was burst open from within, and Brown, his grey hairs almost erect, and his eyes glaring with terror, rushed forth, descended the stairs by frantic leaps, and hurried fearfully from the house. When the attendants ventured to enter, all was solemnly silent. They looked towards the bed, its late tenant was not there. Tremblingly they glanced around, and found the corpse stretched upon the floor, one arm extended, as though reaching forth graspingly towards the door in the last expiring struggle of nature. Before night closed upon the scene, remorse and horror had claimed another victim. Terrified, as it would seem, with the idea that the dying man was following close behind him, driven to desperation too, with the reproaches which had probably been heaped upon him, and his conscience suddenly awakened by witnessing the mental agonies of his expiring fellow-sinner, the miserable man, Brown, hastened to his own house, entered it unseen, shut himself in his chamber, and was found, not long afterwards, lifeless, with the instrument of self-destruction grasped firmly in his hand.

Robinson survived his former associates, about fifteen years. It is now about forty years since my father bought Woodsdale farm, and came to reside upon it. I was then eight or nine years old. Soon after we had taken up our abode here, my father had some business to transact with Robinson (the son, not the father), and I accompanied him. The house was in a different condition then to that in which we have this day found it; but even then, I cannot help remembering, there was an air of gloom about it which chilled my veins.—As we walked up to the front of the house, we encountered, in charge of an attendant, an aged man who gazed wildly at us for a second or two, and then, without speaking a word, struck off into a side-path, and was shortly out of sight. This old man was the Robinson of my story. On our arrival at the house we were shown into a parlour, where we were joined by the younger Robinson, a sad looking, gentlemanly person of middle age, with whom my father entered into conversation on the business in hand.

The elder Robinson never recovered from his hypochondriacism. His son lived with him and managed his affairs, a servant, his constant attendant, followed his steps by day and slept with him by night—linked to him hand to hand, lest he should escape unperceived; the comforts of life were lost to him, he rarely spoke, except to himself; shunned all society; and at length died, unlamented and unblessed.

At his father's death, his son broke up the establishment, shut up "the Folly," after an auction of all his furniture; disposed of all his inherited property at H——; and immediately left the neighbourhood 'Robinson's Folly,' has ever since remained unoccupied, the terror of the ignorant, and a beacon to all who can read aright the lesson which it teaches.

Crowded Lawyers and Sign Shops.—New York, like London, suffers among other ills from a plethora of lawyers. A young barrister in the American city, according to the *New York Sun*, wrote thus to his friend in the country:—"When I came here three months ago, I could'nt find even an opening on the building for a twelve-inch tin, so thickly was its front be-plastered with the tins of my co-tenants. Only this morning a neatly-dressed black-woman came into my office. 'A client, by Jupiter!' I exclaimed.—'Please, sir!' said she, dropping a courtsey, 'do you keep signs for washing and ironing, and going out to day's work done hear, to sell?,—No, we don't!' I gruffly answered—'No offence, sir, but I seed so many on the outside, I thought maby the gentleman kept a sign shop!'"

EDITOR'S TABLE.

TO CORRESPONDENTS.

Letters have been received since last issue, and attended to, from D. D. E., Pelham; J. C., Mulmur; M. D., Paris; J. W., Terrebonne, L. C.; A. C., Pickering, (your name was not handed us when it should have been); J. McK., Mosa; H. W., Hamilton, (what agent? either a pretended one, or he has omitted to send us your name.)

J. W. S, Amherst, N. S. We have forwarded six copies. If you can circulate more in your vicinity, we shall be happy to send them.

N. M. H., Brantford. Mr. E. has sent the papers as you desired.

C. S., Charlotte Town, P. E. Island. Your order, with remittance, received. The papers are sent in packages, as you request.—The trouble is of no account. We feel much gratified with such liberal support.

F. W. B., Thornhill. As you will perceive, the story in our literary department occupies all our disposable space in this number—Your article must therefore lie over till next issue; and if by that time we shall have been able to understand it, we will give it to the printer. We begin to lose confidence in our "shrewdness," however.

G. B., Amherstburg. Your communication shall appear in our next.

A Home District Farmer. Your hints were too late for insertion.—All matter, except news, must be in the printer's hands at least one week before the day of issue. If remoddled, they will answer for our next number.

W. A. S. The case you mention, if there had not been a sort of permission to take the timber, might be treated as theft, but it ought rather to be treated as a trespass. Under the petty trespass act of 1834, Magistrates have power to adjudicate on such cases. The amount which they may award to the plaintiff, for the injury, is limited to five pounds. See 4 Will. 4, chap. 4, sec. 3.

To Agents.—We have received several complaints from parties who say they have subscribed and *paid* our agents, but their names have not been sent to us. We wish agents to forward the names of subscribers as soon as possible after receiving them, and to be very careful not to make any omissions. A correspondent at Brantford mentions that Mr. Tapley, S. Palmer and John Lounsbury, subscribed to Mr. Chatterson, but had not got their papers. Will Mr. C. explain this? We shall send the paper till we hear from our agent.

We hope Postmasters and all others friendly to our publication, as well as the parties themselves, will inform us of any cases of this kind, in order that we may correct mistakes and detect dishonesty, if any be attempted. We would rather lose a dozen copies than that one subscriber should not get his paper.

Back Numbers.—We have plenty on hand.

Poetical Geography and Rhyming Rules for Spelling.—Brewer, McPhail & Co., Toronto, 1848. We have just had a copy of a little book with the above title laid upon our table. The author, Mr. W. A. Stephens, of Norval, is already "known to fame," as the phrase is, in Canada. In this effort he has at all events hit upon something *new*, and we are inclined to think, of considerable utility. The boundaries and position on the map, of the chief countries in the world, are described in *verse*, with the view of being more easily committed to memory by the young student of geography. Some of the descriptions are almost too long, but upon the whole will, we think, answer an excellent purpose. The "Rules for Spelling" are admirably arranged. We would recommend all school teachers to provide themselves with the book, for the sake of these rules alone.—The author has taken the rules as laid down in our common grammars, and turned them into respectable verse, using very few more words than are required in prose. The following is the first rule:—

"All words of but one syllable
Must end in double f, s, l;
That is, when single vowels lead,
But not when consonants precede.
Exceptions—of, if, as, us, is,
And as, was, yes, this, thus, and his."

The price, we suppose, will not be more than 1s. 3d. per copy.—We would suggest to the author, in preparing another edition, to add a versification of chronology. It would make the book of a more respectable size, and greatly enhance its value.

THE LADIES.

THE LAST LEAF.

BY OLIVER WENDALL HOLMES.

I saw him once before,
As he passed by the door—
And again,
The pavement stones resound
As he hobbles o'er the ground
With his cane.

They say that in his prime,
Ere the pruning knife of time
Cut him down,
Not a better man was found
By the crier on his round
Through the town.

But now he walks the streets,
And looks at all he meets,
So forlorn,
And he shakes his feeble head,
And it seems as if he said,
"They are gone!"

The mossy marbles rest
On the lips that he pressed
In their bloom;
And the names he loved to hear
Have been carved for many a year
On the tomb!

My grandmamma has said—
Poor old lady, she is dead
Long ago—
That he had a Roman nose,
And his cheek was like a rose
In the snow.

But now his nose is thin,
And it rests upon his chin
Like a staff;
And a crook is in his back,
And a melancholy crack
In his laugh.

I know it is a sin
For me to sit and grin
At him here;
But the old three cornered hat
And the breeches and all that,
Are so queer!

And if I should live *to be*
The last leaf upon the tree
In the spring!
Let them smile as I do now,
At the old forsaken bough,
Where I cling.

STYLE!—A lady-writer in the *Louisville Courier*, thus describes a lecture delivered by the Rev. Mr. Maffitt. It appears to us—if the lady will excuse us an illustration introduced because inapposite—that she has over-egged her pudding. "In after years, when the lurid flame of criticism, prejudice, and malice, shall, like a schoolboy's rocket, blazing meteor-like for a moment, in serpentine brilliancy, expire, leaving but their blackened fronts, shall the name of John N. Maffitt, bathed in the sun-light of immortality, phœnix-like, rise from smouldering ashes of departed glory, spreading her ruby wings heavenward, cleave the blue dome, and lay her trophies at the feet of that angel of eloquence, who, rising from her celestial throne, shall inscribe his autograph upon the brightest gems that deck her coronal of glory."

TOO LOVING BY HALF.—A young lady who has been tried, in the state of Alabama, for firing a pistol at her false lover as he was escorting another fair one to church, was acquitted, on the ground that there was no malice, but, on the contrary, an excess of love.

A YOUNG GOOSE.—A market girl sold a gentleman a fine fat goose, warranting it to be young. It turned out when roasted to be unmanageably tough. The next day the gentleman said to the market girl. "That goose which you sold to me for a young one was very old."—"Certainly not," said the girl; "don't you call me young?"—"Yes."—"Well, I am but nineteen, and I have heard mother say often that the goose was six weeks younger than me."—*Boston Chronotype.*

The *Boston Mail* mentions the following remarkable circumstance of American delicacy.—A young lady fainted one morning, recently, when told by one of the country chaps that he had chickens for sale, but they were *undressed.*

We take the following recipes and directions from that excellent, though somewhat expensive work, "Webster's Domestic Economy and housekeeping." The intelligent housekeeper, who is provided with this voluminous book, may consider herself prepared, so far as information will go, for any emergency. It contains a little of everything. We find the following under the head of "Cooking for the Invalid." Every one who has had the misfortune to be sick, knows how comfortable it is to have *nice things* made for us on those occasions:—

MILK NOURISHMENT FOR INVALIDS.

Milk Porridge is sometimes made by adding milk to fine groat gruel. Another way is, to mix a tablespoonful of oatmeal in a basin with cold milk, and to pour it, when perfectly smooth, into a saucepan containing half a pint of boiling milk. If this does not thicken it sufficiently, it must be boiled a little longer.

Scotch Porridge.—Stir oatmeal and water together, and let it settle. Pour off the water, and add fresh to it. This must remain till the next day, when the water is strained away from the oatmeal and boiled. Milk is added while the porridge is boiling. The milk must be in the proportion of two parts of milk to one of water.

Onion Porridge.—Boil an onion, sliced, in water for half an hour; pour away the water, and add to the onions half a pint of new milk. Boil together the milk and onions for half an hour, and serve all together in a basin. This taken at bedtime, inclines a patient to sleep and to perspire.

Ground Rice Milk.—Rub a spoonful of ground rice very smooth in a little cold milk; add to it three half pints of milk, some cinnamon, lemon peel, and nutmegs; boil all together for a quarter of an hour. Sweeten to the taste.

Sago Milk.—Wash in cold milk a table-spoonful of sago, pouring off the milk, but adding to the sago a quart of new milk. Let both boil slowly together till reduced to a pint. Cinnamon may be added if required; but neither sugar nor spice is added to this food.

Arrow-root and Milk.—Mix smooth, with a very little cold milk, one desert-spoonful of arrow-root. Boil half a pint of new milk, and the moment it rises to the boiling point stir in gently the arrow-root and cold milk. It should be very thick when first made, or, on becoming cool, it will be too thin. If it does not thicken sufficiently at first, it must be boiled until it does thicken. But when milk and arrow-root are boiled together, it is supposed that it becomes of a more astringent nature than it is desirable it should be for invalids, generally speaking.

MEAT AND VEGETABLE TEAS.

Beef tea should not be made like common gravy or broth, but by a process which will prevent the fat from mingling with it. Cut half a pound of nice gravy meat into thin slices, and lay them in a hollow dish, pouring over them a pint and a half of boiling water; cover the dish, and place it near the fire for half an hour; remove it into a sauce-pan, and boil it for ten minutes over a quick fire; remove the scum which has risen in boiling; let it stand covered for ten minutes longer; strain off, and season it with salt only. Beef tea thus made is a light and useful nourishment to those whose stomachs are weak and irritable. It will serve also for the food of young children; and some persons habitually sick in a morning have found it useful as a breakfast.

Veal tea is made in the same way, and in the same proportions of meat and water as beef tea. It is useful in the same cases as those in which beef tea is given.

Chicken tea.—Cut into small pieces a chicken, skin it very carefully, as well as any fat which may be visible. Boil it for twenty minutes in a quart of water; pour the broth away from the meat before it gets cold. The tea is generally given in cases of debility, after fevers, and at the commencement in an invalid of a state of convalescence.

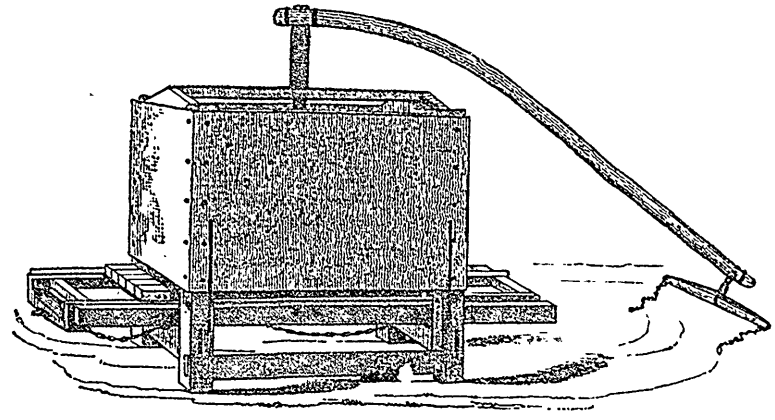
Extract of Meat.—When the pure juice of meat is to be given to invalids, it may be obtained by putting a little lean beef or mutton, cut small, into a glass bottle, corking it up and tying a bladder over the cork; the bottle must be put into hot water and boiled gently for an hour. On opening it, a small quantity of real gravy may be poured away from the meat.

Balm and Mint Teas.—The young sprouts of either of these aromatic plants make a pleasanter and more refreshing beverage for the fever patient than that made from the dried leaves. Boiling water must be poured on the leaves, and the tea-pot or vessel containing it, must be covered over and set for an hour near a fire; during this process of infusion the aromatic properties of the leaves will be given to the water, making it a safe dilutent in fever cases; and *mint tea*, of the fresh leaves, is sometimes useful in allaying nausea and vomiting.

Hyson Tea.—A weak infusion of green tea, without milk or sugar, is a useful dilutent in fevers, colds, and rheumatism.

EGG NOURISHMENT.

An Egg Draught for a Convalescent.—Beat the yolk of a fresh laid egg, and mix with it a quarter of a pint of new milk previously warmed over the fire; add to this a spoonful of capillaire, one also of rose water, and a grate of nutmeg.



BUTTERS' PATENT BRICK AND TILE MACHINE.

The cut gives a view of the external appearance of one of the most perfect labour-saving machines of modern invention. Like all really valuable inventions, it was not completed in a day or in a year. Mr. Butters, with the courage and confidence of true genius, has made it the study of his days and nights for the last ten years; and struggling against another difficulty that has obstructed and defeated so many inventors, to wit: small means—has at last the satisfaction to see his machine, almost, if not quite perfect; exciting the admiration of all who behold it: his patent secured; and a fair prospect of realizing a fortune. The expression that escapes from most persons, on examining this machine is, "How simple—why has this not been found out before!"

We refer the reader to Mr. Butters' advertisement for particulars. We may mention here, that from a fair trial of this machine, it is estimated that from 15 to 20,000 stock brick can be made in a day, with the labour of one horse and six men. It requires a strong horse, and if worked continuously for a whole day, two horses would be needed, to relieve each other. The machine could easily be adapted for making common tiles, and we believe pipe *drain* tiles of the most approved construction could be made by it. This machine will introduce a new era in Brick-making. We expect before long to get drawings illustrative of the internal arrangements, when we will give a full description of the *modus operandi*. In the meantime we would recommend all brick-makers to "call and examine for themselves." The price, we are informed, will be about £62 10s.

Shot Making.—Some of our young readers perhaps are not familiar with the process of manufacturing shot, and wonder how so many little globes are turned out of various sizes. Baltimore is a city of shot towers as well as monuments, and the manufacture of shot has become quite an item of business in St. Louis. Mr. Kennett, of St. Louis, has recently constructed a new tower, and the *Republican* thus describes it and the process of shot making.

The tower is thirty one feet in diameter at the base, seventeen feet at the top, and one hundred and seventy-five feet high. The lead is conveyed by an endless chain into the upper story, where it is melted, and whilst in a liquid form, is passed through a sieve of the size of shot intended to be made, and falls the distance of one hundred and fifty feet, into a cistern of cold water. This gives the globular form to the drops, which are chilled before reaching the water, and entirely cooled by the time they get to the bottom of the cistern. From this cistern they are conveyed into a heated drum, in which a spiral wheel brings them all in contact with heated air, and thus dries them. They are then passed into a revolving cylinder, in which they are polished, and from thence passed over a succession of inclined planes or tables about six inches apart. In passing over these tables, the imperfect shot drop between the tables, and those which are perfect, roll over into the receptacle below. They are then passed into a hopper, and by a succession of seives, or guages, worked also by machinery, the various sizes are separated. Each seive is then emptied into the appropriate receptacle. The whole process is more simple than would be supposed by those who have not witnessed it.

Ancient Metals.—It is stated in Jacobs' Essay on the Precious Metals, that in the ruins of Herculaneum and Pompeii, which were destroyed by an eruption of Vesuvius more than seventeen centuries ago, no ornaments of gold and silver have been found.

Street Sweeping Machine.—Mr. C. S. Bishop, of Easton, Pa. has invented a machine for sweeping streets. It is so constructed as to sweep along the street carrying up all the dirt into a wagon. In fact it is simply a wagon street cleaning machine, which by the simple motion of itself through the street will sweep up and carry off all the dirt speedier and better than can be done by hand.

Covering for Roofs.—The Albany Evening Journal says that immense quantities of straw paste-board are manufactured in this country, and sent to England to be used, after preparation, as a substitute for tiles and shingles. It is laid on the roof, then saturated with tar and coated with sand. This forms a perfect roofing, and is more enduring than any other article used.

Blowing Logs.—The Pettersburg, N. Y, Messenger says that Dr. Jewett has planned a good thing for blowing Logs. It is a screw with a hole just large enough for the fire to communicate with the powder, through the middle. This being screwed into the hole after the powder is placed, confines it so closely, that there is no escape. Every charge splits its log.

Causes of Epidemics.—Little is known of the immediate chemical or vital causes of epidemics; but in given circumstances, where many are immersed in an atmosphere of decaying organic matter, some disease is invariably produced; where there is starvation, it is most frequently typus; cold, influenza; heat, is cholera; yellow fever, plague. At the mouths of the Ganges, of the Nile, of the Niger; in London, particularly up to the seventeenth century; in camps; barracks, in ships, in prison, formerly; In Ireland, in Liverpool, in all our towns now, the circumstances in which zymotic diseases become epidemic may be witnessed. A city breathing an atmosphere perfectly pure may not be exempt from every epidemic; but observation has shown that such irruptions are unfrequent; and fatal to few persons of strength of constitution. Internal sanitory arrangements, and not quarantine or sanitory lines, are the safeguards of a nation, A salubrious city in an epidemic—like a city built of stone in conflagration—is exposed to danger and injury, but not to the same extent as the present cities of Europe, which are left without any adequate regard for the health and security of their inhabitants. The great historical epidemics have diminished in intensity; and there appears to be no reason why they should not be ultimately suppressed, with the advance of the population among which they take their rise. Their origin is obscure, but influenza appears generally to become first epidemic in Russia—cholera in India, that the source of the latter must be attacked. If the health of India becomes sound, Europe might be safe, and hear no more of the epidemic which is traversing Russia. The attention of the Indian authorities has for some time been directed to the subject. The other nations of Europe are beginning to take an interest in public sanitory improvements; and any found in England will no doubt, be carried out as speedily as possible in all parts of her Majesty's dominions; for the vast population that owns sway is intimately united. Asiatic cholera has taught us that the lives of thousands in England may depend on the condition of the Pariahs of Jessore.—*Report of the Registrar General.*

Caoutchouc from Drying Oils.—In the forty-sixth volume of the *Archives de Pharmacie*, Paris, M. Jones has an essay on this subject. Linseed oil, boiled for a long time, yields a brownish varnish; this is is to be boiled for a long time in water containing nitric acid; the loss by evaporation must be supplied, and the acid not allowed to act too violently. At last a substance is obtained which gradually solidifies; this is to be washed to free it from acid. This substance does not adhere to the fingers, is plastic, does not melt by itself, and when heated strikingly resembles caoutchouc. It dissolves partially in ether and sulphurate of carbon, entirely in oil of turpentine.

Curious—It has lately been discovered that the flesh of animals which are killed in the middle of the night, will keep much longer than when they are killed in the middle of the day. The flesh is fittest for keeping when the respiration is lowest, and the temperature of the animal lowest.

MARKETS.—We are not able to say anything of our markets, except that they are without change. The recent news is of so strange a character, and so uncertain, as relates to the future, that buyers are cautious. We refer the reader to our table of prices.

We are pleased to see and to hear that the fall wheat in this part of the province does not show so much injury from the winter as was feared.

NEWS FROM EUROPE.

Since our last issue the *Washington*, an American steamer, and the *Hibernia* have arrived, bringing important news. The former arrived at New York on the 7th, and the latter on the 10th.

Her Majesty has given birth to a Princess.

The French Revolution is still working out its objects peacefully. In almost every country on the continent of Europe the people have risen and demanded reform, which their rulers have been obliged to give them. Absolute monarchy may be said to be at an end. Even in Russia there are signs of amelioration. At Vienna, the capital of Austria, a conflict has taken place between the people and the military, and a number of lives lost. Prince Metternich, the Emperor's Prime Minister has been obliged to fly: his house was sacked and burned to the ground. At Berlin also, the capital of Prussia, fighting took place, and the King granted the reforms demanded by the people.

The provisional government of France have had great difficulties to contend with. Several banks and merchants have failed. The finances are in a bad state. 60,000 guards unarmed, marched through the streets of Paris for the purpose of intimidating the government into an acquiescence with their views. On the following day the workmen of Paris turned out to the number of 100,000, as a demonstration in opposition to that of the guards, and in support of the republic A dreadful collision was expected, but the guards issued a declaration that they bowed respectfully to the provisional government.

The Telegraphic news of the *Washington*, as reported in this city, mentioned the loss of 2000 lives in Dublin, from a collision between the troops and people—this turns out to be a mistake. The meetings on St Patrick's Day to congratulate the French, passed off without disturbance.

The Duke of Saxe Cobourg Gotha promises a constitution to his people.

The King of Saxony has been requested by deputations to make reforms, and he promised to refer the matter to the next Diet. The reply was unsatisfactory, and his Ministers resigned. An extraordinary Diet was called.

Disturbances prevailed all over Germany. The people are burning the castles of the nobility.

The King of Naples consents to the formation of Sicily as a separate State.

A Constitution was to be proclaimed at Rome on the 11th.

There is a report that Milan is in open rebellion, and that it has been bombarded by the Austrians—which, however, is doubtful.

At Warsaw, the censorship has prohibited the mention of the French revolution.

At Posen the revolution created great sensation.

Lord Clarendon is spoken of as successor to Lord John Russell.

The Marine of England is being increased, large numbers of troops are in Dublin, prepared to suppress any insurrection.

The *Gazette de Silesia* reports the death of the Emperor of Russia. Letters from St. Petersburgh to the 3rd March say nothing on the subject.

Louis Philippe resides at Claremont, and has frequent interviews with the ex-Ministers.

The people are in arms against the Elector of Hesse Cassel. Three days have been given to decide the grant or refusal of reforms.

There is a rumor at Kiel that Copenhagen is in open rebellion. The King was besieged in his palace. The grand Duke of Wiemar was besieged in his palace, also, when he promised the liberty of the press.

The Elector of Hesse Cassel barely escaped with his life.

There was a rumour in London that an attempt was made on the life of the Queen of Spain.

Disturbances have taken place at Hamburg and Lubeck. Several persons were killed, and the riot was suppressed.

A German journal says Hungary has declared itself independent of Austria, and has established a Republic.

Prices in England were a trifle lower than those mentioned in our last. New York prices are without change. The following is a summary of the news by the *Hibernia*, seven days later than by the *Washington*:—

Nothing startling. Everything going on well.

The financial difficulties continue.

A revolution has taken place in Lombardy.

The Viceroy has fled from Milan, and the people there are triumphant. The troops are negotiating with them to evacuate.

The Pope has granted a constitution to the people of Rome.

Great rejoicings in Vienna, and all tranquil there.

At Berlin the people have been triumphant. Ministers have been dismissed. A constitution promised.

Order maintained in Hanover. The king has abolished the Censorship, and promised other reforms.

DENMARK.—Disturbance—and constitution refused!

The German Duchies reject the King's plan to unite them with Denmark.

HUNGARY AND BOHEMIA.—All alive, and on point of revolt.

Lola Montes has been in Munich once more, and has been sent away to Switzerland again.

The King of Bavaria is said to have abdicated.

RUSSIA.—Russia is making preparations for self defence.

The Luxembourg has declared itself a republic.

IRELAND.—Tranquil. The leader of young Ireland has been arrested for sedition.

CRACOW!—The Inhabitants of Cracow declared themselves a Republic on the 14th. 15,000 insurgents were under arms on the day before The government was compelled to release 400 political prisoners.

NEW YORK.—The next French packet will take out about £150-000 of specie from New York. The French merchants in New York feel better than they did.

WONDERFUL PHENOMENA.—The water in the Niagara river was so low on the 3d of March, that the rock at the Horse-shoe Falls became dry, and ladies and other persons walked so far across the river as to be directly over the great Fall! "The villagers of Chippewa," says an eye witness, "thought they had entirely lost their Creek. Off the old Chippewa Fort, and about 100 feet beyond low water mark, a burning spring was discovered in the bed of the Niagara river—which some had the curiosity to enclose with an old potash kettle and a gun barrel knotted therein, and succeeded in producing flame and a loud explosion. Several bayonets, muskets, swords, &c., have been picked up. The water has since returned to nearly its usual level.—The cause of the occurrence is attributed to the accumulation of ice at the ingress of the river from Lake Erie, closing for a time the inlet."

CENTRAL AMERICA.—The aspect of affairs in this part of the world is gloomy indeed. The descendents of Montezuma are about to reclaim their country from the Spanish invader. An army of 50 or 60,000 Indians have driven the inhabitants from the cities of Valladolid and Ismael, after a long resistance. They now threaten Merida, to which place the Spanish people had fled. The Indians declare that they will exterminate the whole Spanish race.

HIGHWAY ROBBERY.—A man was knocked down in the town of Prescott, by a fellow called "Tony," (whose real name is Bradley,) and robbed of $25. The ruffian made his escape to Ogdensburgh, but it was expected he would be overtaken by the officers who started in pursuit.

SUICIDE.—A man named Booth, committed suicide at Port Hope on the 7th inst., by taking a large doze of morphia. No reason is given for the act.

An atrocious murder has been committed by a man named Ferries, near Guelph. The person murdered was a constable, who was serving process on Ferries.

HOME MARKETS.

The following table gives the *highest* average prices at each of the three places:—

	Toronto, Apr. 14.			Hamilton Apr. 13.			Montreal Apr. 12.		
Flour, per barrel	£1	1	3	£1	1	3	£1	4	0
Wheat, per bushel ...	0	4	6	0	4	1	0	5	6
Barley, per 48 lbs. ...	0	2	7	0	2	4	0	4	6
Rye, per 56 lbs.	0	3	0	0	3	0	0	3	9
Oats, per 34 lbs.	0	1	6	0	1	3	0	2	0
Peas, per 60 lbs.	0	2	6	0	2	0	0	3	0
Oatmeal, per barrel ...	1	0	0	0	18	0	1	10	0
Potatoes, per bushel...	0	4	6	0	3	9	0	3	0
Hay, per ton	2	10	0	1	15	0	2	10	0
Beef, per 100 lbs.....	1	7	6	0	17	6	1	5	0
Pork, per 100 lbs.....	1	2	6	0	17	6	1	10	0
Lard, per lb.....	0	0	4	0	0	5	0	0	7
Butter (fresh) per lb..	0	0	10	0	0	8	0	0	8