authority, viz., to that of a lady herself. Mrs. Loudon, the wife of the celebrated agricultural writer, in her excellent little work "Gardening for Ladies," lays down very particular directions for the mode of *digging* the soil, preparing and applying the proper kind of manure, making hot beds, &c. &c.; and she gives drawings and descriptions of the implements they must use, and of the little barrow which they are to fill up, *and trundle along with their own fair hands.* By the way, we must *not forget* that she allows them to wear a leather gauntlet, to protect *their* delicate fingers from the rude touch of the vulgar earth.

Such a garden as almost every farmer may cultivate without trenching upon the labours of the field, may be made to supply one-fourth, at least, of the food which is required for the consumption of his family *during the summer*, to say nothing of the *air of comfort* and sociability it gives to his dwelling, and the rosy hue of health such employment imparts to the young ladies, a matter of no small moment to an affectionate and indulgent father. We say, then, to all, however multifarious the objects demanding your attention, do not forget your garden.

We extract the remarks below from Gardener's Dictionary. They are taken by him *from an* English writer, and refer chiefly to market gardens; many of the hints, however, will be found useful for ordinary cases:—

Deep trenching in some degree prevents that peculiar deterioration of the soil which would be the consequence of the frequent repetition of similar plants. This effect is most perceptible when the plants perfect their seed, which is seldom or never allowed to take place in market gardens; but great attention is paid to the species of plants which succeed each other on the same spot. The principle which experience and theory unite in establishing, is that of avoiding the too frequent recurrence of plants which belong to the same natural families. The greater variety cultivated in gardens, in comparison with the common produce on a farm, enables this principle to be fully acted upon. Those gardeners who overlook this, and repeatedly sow or plant the same kind of vegetables in the same spots, are soon aware of their error by the diminution of the produce, both in quantity and quality, and by various diseases which attack the plants, however abundant may be the food supplied to them or careful the tillage.

The principle on which the gardens are cultivated is that of forcing vegetation by means of an abundant supply of dung, constant tillage, and occasional watering. The whole surface is converted into a species of hot-bed, and crop succeeds crop with a rapidity which is truly astonishing. Those vegetables which arrive at a marketable state in the least time are always the most profitable, and those also for which there is a constant demand at all times of the year. With an abundant supply of manure, the market gardeners have no fear of exhausting the soil, and dissimilar vegetables may grow together on the same ground. Trees bearing fruit may be planted in rows, especially those of the dwarf kind, and under them those vegetables which do not require much sun may be raised to advantage. Raspberries, gooseberries, and currants, are planted in the rows between the trees. These rows being thirty or forty feet apart, leave ample room for vegetables; but in those gardens where the *finest* vegetables are raised, and particularly in those which are appropriated to the growth of seeds, no trees are permitted to shade the ground; even the hedges, if there are any, are kept low and clipped, that they may not give any shade, or harbour small birds.

A garden should always be laid out in a regular form, with narrow parallel beds, and paths between them. One or more roads, of sufficient width to allow a cart to pass, should intersect these beds at right angles, for the convenience of bringing manure and taking off the produce. The beds should not be above six feet wide, so that a person may easily pull up weeds or gather the vegetables without treading upon the beds. The surface soil taken from the paths serves to raise the beds, and in retentive soils may carry off the superfluous water after sudden and violent rains. The whole ground should have been trenched two spits deep or more; and this trenching should be frequently repeated, to mix the upper with the under part of the soil, and distribute the decomposed dung throughout the whole depth. Thus in time a rich black mould will be produced, in which every kind of vegetable will grow most rapidly. For early plants, and those which are used in winter, and require to be protected from frost, narrow beds are made, lying in a direction east and west, and sloping towards the south, with the north side raised high, so that their surface forms an angle of twenty or thirty degrees with the horizon. This gives the plants a protection from the north winds, and exposes them more to the influence of the sun. In very frosty weather, these beds are covered with mats or loose straw. We do not mention frames covered with glass, as they belong to a higher kind of horticulture; but a moderate hot-bed, made with fresh dung, and covered with mats laid over hoops, is indispensable for the raising of early vegetables. By these means, radishes and various salads may be raised very early in the spring, and sometimes in mild winters, without any interruption the whole year.

An abundant supply of manure is indispensable in a market garden, and this can generally be obtained in large towns at a trifling expense. The neighbourhood of a town is therefore a necessary circumstance towards the production of the crop, as well as its sale. It would be impossible to make a sufficient quantity of manure by means of the horses which are employed to carry the produce to market, and the extent of land usually laid out in garden ground could not raise sufficient food for cattle without taking up a space which may be more profitably employed. The only animal which can be kept to advantage by a gardener is a pig. This animal will live well on the offal of vegetables, and the gardens of cottagers could not well be kept in a fertile state if it were not for the manure made by the pigs.

The profits of a garden near a large city, of the extent of 10 or 12 acres, are as great as that of a farm of ten times the extent cultivated in the best manner, without the help of purchased manure. But if manure can be obtained at a reasonable rate, as is often the case in great thoroughfares, where many horses are kept for public conveyances, although there be no immediate demand for vegetables, a garden may be very profitably cultivated, entirely for the purpose of raising seeds. The demand for seeds of all the most common productions of a garden, and especially of flowers, is very great, and the profit of those who retail them in small quantities is so great that they can afford a liberal price to those who raise them with proper care, so as to keep the varieties distinct.

Many plans have been proposed for the distribution of the crops in a garden; but none of them are suited to every situation. Much depends on the nature of the soil, which may be better suited to one kind of produce than another, and also to the demand for any peculiar class of vegetables. New sorts may often be introduced with advantage. The raising of any useful plant with great care will often give a man a reputation, which makes it advantageous to him to confine himself to these principally, and raise them in the greatest perfection. An ingenious man will find out what is most for his own advantage; and, from the list of plants which may be cultivated for ornament or for use, a selection may be made which may be well suited to the situation of the ground and the circumstances of the grower. The practice of the market gardeners may be examined with advantage; and long experience, with the test of profit, will lay down better practical rules than the most plausible theories.

The application of the garden husbandry must be in the preparation of the soil by deep trenching and digging, carefully drilling or dibbling all the seeds in rows, stirring the soil between the growing plants, and keeping the ground clear of weeds by the hand and the hoe. These last are the most essential part of the cultivation. By daily attention to the progress of the plants, *and continual assistance at critical periods*, sometimes thinning out, and at other times transplanting to produce an equal crop, and treating every plant as if it were a rare plant in a garden, the ground may be made to produce more than double what the most attentive farmer could expect on a larger scale.

These short rules may be added for garden cultivation:—

1. Regulate the distribution of your plants with respect to shade and sun. Ordinary standard trees should be on the north and west sides, near or *against the wall or fence*, so as not to shade too much from the sun.

2. Alternate the crops, and do not plant varieties together, lest the pollen should mix.

3. Plant immediately after preparing the soil.

4. Seeds and young plants require to be kept moist, and with light soil about them.

5. Stirring the ground about well-set plants is one of the most certain and rapid means of forwarding vegetables.

6. Trench the soil over sixteen or eighteen inches deep regularly every four or five years, taking a fifth part annually.

The following remarks from Judge Buel are concise, and well adapted to farmers:—

"The month of May is an important one in the operations of the garden. If not already done, no time should be lost in sowing the seeds of onions, salads, early cabbage, pease, radishes, and in planting early corn and potatoes. The beet, carrot, parsnip, and summer squash, may also be sown. Cabbages for winter use may be sown in time from the 20th to the 30th. As soon as the soil and the season are warm enough to bring up corn, which here is generally from the 15th to the 20th, plant your melons, pumpkins, and cucumbers, though it will do equally well to plant the latter, for pickles, in the early part of June. The 15th will ordinarily do for Lima beans, which are the best of the bean family. Soak the seed of these in warm water a few hours, and cover them slightly when planted. My practice is to save this crop for winter use. They afford a good product. When frost is apprehended the beans are all picked, the unripe ones shelled out and dried, and, if soaked before cooking, are nearly as good as when first gathered from the vines. Perennial products require very little care after they are once established. We will name of fruits, the strawberry, the currant, gooseberry, plum, pear, quince, grape, and, in situations where they will thrive, the apricot and peach. But of fruits we would have none but the best sorts, for the best are as cheap as the worst, are as easily cultivated, and are infinitely more healthy and grateful. These, if well selected, will give a succession of fruit from June to November, and in a preserved state during the year. Plants to begin with will cost from three to five dollars. They may be multiplied by grafting, budding, &c. The trees should be so arranged as to shade as little as possible the grounds that are to be tilled. Half a dozen roots of the pie-plant (rhubarb) will furnish abundant materials for pies and tarts, in no wise inferior to the gooseberry, from April to July, or until the fruit is sufficiently advanced to supply its place. These should be planted two feet apart in good soil. A bed of forty by three and a half feet will supply the table with delicious asparagus during a part of April and the whole of May and June, if kept in good order. For this the ground should be dug deep and made rich.

"The annual products which go towards subsisting a family, and which are seldom produced but in the garden, are numerous, as the onion, beet, carrot, parsnip, cabbage, pease, beans, pot-herbs, salads, radishes, squash, cucumber, melon, &c. Some of these are in use most of the season, and most of them afford valuable winter stores."

Correspondence.

THE POTATOE DISEASE.

For the Canada Farmer.

GENTLEMEN.—If you think the following remarks might prove serviceable to the readers of your highly interesting journal, you will please give them publicity.

In investigating the nature of a disease like that which has destroyed the potatoe crop to a very great extent both in Europe and America during the last few years, we cannot be too cautious in recommending any preventive that we may, by close observation, have discovered. I say partial preventive, because we have no reason to believe that an effectual one has yet been found out, though scientific men have devoted much attention to the subject. We are justified in applying supposed antidotes, unless for mere experiment—only so far as they afford us a reasonable prospect of ample remuneration for all additional labour and expense that may thereby be incurred.

Last year I planted my potatoes in "new land," (something rather unusual in this part of the country) having cleared a few acres principally for the wood, and determined not to leave it in the slovenly condition in which we find so many patches where firewood has been taken off. I thought it might be profitably planted with potatoes and turnips, as it could be easily prepared in time for these, though perhaps not early enough for any other seed, besides, an opportunity was offered for an experiment. We commenced planting about the 20th May, and continued until the 15th of June; the work having been given to one man, who performed it with a common hoe. The few weeds that made their appearance during the summer were carefully removed, but no additional earth brought to the hills, which had been made full large when planted, a circumstance that will in part account for the long time occupied in planting two acres. When the proper season for digging arrived I was struck with the difference between those that had been planted either in rich vegetable mould mixed with ashes, or fresh clay where knolls had been removed, similarly mixed, and others planted similar in all respects, excepting that they wanted the ashes, which were not equally distributed, on account of the leaves and rubbish in many places not burning, and requiring to be removed. Of this fact I became satisfied, that wherever the ashes were liberally mixed with the soil, which was by far the greater portion, the tubers were nearly all sound, but in the absence of this ingredient more than two-thirds of the tubers showed traces of the disease; upon the whole I had a very good crop. About one bushel in ten *being unfit for* house-use, were eagerly consumed by both pigs and cattle. In confirmation of this statement, I may mention that a neighbor planted on "new land," but in consequence of not getting a "good burn" his potatoe crop was affected very materially.

With regard to the failures immediately adjoining my own farm on every side, potatoes were planted on "old-land" well manured with barn-yard manure, and ploughed several times, as is usual for such crops. The result may be judged from the fact that nine-tenths of the land thus planted, has remained undisturbed to the present time. The same rule so far as my observations go, may be practiced to great advantage in cultivating turnips.

Potatoes planted very early, generally speaking, are the best; but notwithstanding the difference as already noticed in the time in which mine were planted, no perceptible advantage could be observed. In the comparatively new Townships of this as well as other Districts of Western Canada, scarcely any loss has been sustained in the Potatoe crop; while many farmers of the older Townships, have to go to the "Bush" to get a supply for table use.

The above observations are submitted with greater confidence on account of the writer's having read several well authenticated statements of the application of common ashes to soils that had been cropped for ages, with the most signal success.

A CANADIAN FARMER.

Markham, March 28, 1847.

We strongly recommend the above to the attention of our readers. We had written a few remarks on the effect of salt in preventing the disease, but were obliged to leave them out to make room for our correspondent. A friend in England, who lives on the sea coast, in a letter just received, states, that scarcely any trace of the disease was seen in a number of fields that had been overflowed by the sea; and from many other experiments, we believe salt, which contains a large portion of *soda*, and wood ashes, composed chiefly of *potash*, both alkaline substances, afford the best remedy that has been discovered. We shall go more fully into the consideration of salt as a preventive of the disease and as a manure, the quantity, time, and mode of application, in our next number.

For the Canada Farmer.

MESSRS. EDITORS.—In a conversation with a brother farmer, relative to an article which appeared in your journal, (No. 2,) copied from an American paper, on the destruction of the *grub* and *wire-worm*, by ploughing the ground three or four inches deeper than usual, and then pressing it down with a heavy roller, so as to prevent their working to the surface:—he observed, that from personal and practical experience, he found, by sowing and working the land with Buckwheat, either for grain or manure, will not only effectually destroy them, but at the same time, leave the soil in an enriched and high state of cultivation. One or two crops will be enough to attain the desired result.

This remedy, he considers much surer than ploughing and rolling, and better adapted to the interests of the farmers of this country than the American plan.

Yours faithfully. J. J. B.

TIMELY HINT—SOOT IN CHIMNEYS.—Towards the latter part of winter, it often happens that the soot in chimneys has become much accumulated, and large fires, in windy weather, causes it to take fire, and burn with violence, throwing out from the top large masses of flame and smoke, and many sparks and burning cinders fall on the roof. If the shingles are dry, the danger is imminent, and many house-burnings doubtless originate in this way, more especially if this happens to take place in the night. To remove the difficulty and danger, burn out the soot in calm wet weather, by setting fire to straw, properly placed in the chimney for this purpose.—[Albany Cultivator.

TO PREVENT FLIES ATTACKING MEAT. The butchers of Geneva have a singular mode of preventing flies from attacking the meat in their shops: they rub the walls and boards on which the meat is placed with the essential oil of laurel, the smell of which keeps away this troublesome insect.