

the soil, or into a pot of soil provided for the purpose. The young growing point of the shoot should be taken out in the operation. By the English mode of making the slit, a great number of the shoots will be broken and spoiled. Anything can be propagated by layers; and it is an excellent mode of raising rare things that can be, but with difficulty, increased by any other.

We need scarcely repeat our frequent instructions how to trim hedges—if they have not been attended to, do it now. Make the base about four feet wide cutting with a sharp scythe up to an angle at the top five feet or so from the ground, so that there are but two faces.

Gladioluses are very liable to a disease like rust in wheat, which destroys the foliage. Sulphur is the best remedy; and if this does not check its progress the leaves should be cut away as soon as the affection is seen, as it soon spreads through a full collection.

#### FRUIT GARDEN.

Where new Strawberry beds are required to be made that will bear well the next season, the very first runners of the season should be selected, and layered into small pots. In about three weeks they should be cut from the parent stem, and left to a separate and independent existence for a few days. After preparing the ground properly for their reception, the pots should be well watered and the plants turned out into the spots designed for them. They will then grow finely the present season, and bear surprising crops of fine fruit the next Spring.

A warm sandy loam is the best for a Strawberry bed. A low and damp one is, of all the most objectionable. Though warm and dry in one sense, it should be rendered capable of retaining moisture in the driest weather, and this can only be perfectly accomplished by draining and subsoiling. If the latter is done three feet deep, all the better.

Unless in a very sandy soil, a very heavy dressing of stable manure is objectionable. Wood ashes, ground bones, and matters of a mineral nature are far more advantageous.

Strawberries for forcing are treated in pots, as we have already described; but instead of being transferred to the open ground, when well rooted in small pots, are repotted into five or six inch pots, and these latter plunged in the ground to their rims in the most favorable to Strawberry growth.

After having grown well, and when they show signs of having formed a good strong crown, they are to be taken out of the open ground and gradually ripened by withholding water,—taking care that it is not done so suddenly as to make the plants wither, or they will suffer much. Towards winter they can be set in a cold

frame and covered with dry leaves for a slight protection from the frost till wanted. Many commence to force at the beginning of the new year, when they are brought into the greenhouse and must be set near the glass. A high temperature is fatal, 45° to 50° is sufficient for a few weeks, and 55° to 60°, when the fruit is fairly set. They love to be frequently syringed and guarded against Red Spider, which is their greatest pest. Where there is not the convenience of a greenhouse to force Strawberries, they may be had a few weeks earlier than usual by making a piece of ground slope to the south-east, planting out as already described, for garden culture, and then setting a glass frame over them. The nearer the frame and glass can be brought to the soil, the better and earlier will the crop be. Protecting from frost in winter also adds to the earliness of the crop. The earliest variety to be had in the locality should be employed.

The thinning of fruit,—watching of insects, especially borers in Dwarf Pears, Quince, Apple and Peach,—and summer-pruning, are the main subjects of attention at this particular season. Where the soil is not very good, as may be noted by a weak growth of the trees, a surface manuring may be yet given with advantage. Every day's experience more decidedly shows the great advantages to the pomologist of this method of applying manure.

#### Communications.

To the Editor of the Journal of Agriculture.

#### POTATO BLIGHT.

Halifax, July 27, 1868.

Either observation or experiment is required in order to ascertain the nature of this destructive pest. If the disease be in the plant itself it is rather a bad, if not a hopeless case; but the chances are in favor of the destruction being caused by parasitic insects. In this case the investigation must be either direct or deductive, or both. An examination of the plant will, at this season, when it comes into flower, exhibit the presence of a green aphid, which is probably a peculiar kind infesting the potato, and has the power or function, at a particular phase of its existence, of exuding a saccharine gum. It is possible that either the potato aphid (green fly, plant louse, &c.) exudes an acrid poison, or else that the potato plant is peculiarly obnoxious to its action. In most plants it results from confined air; its generation in the potato would probably be a good deal checked by planting in drills wider apart, and removing the lower leaves before the plant flowers.

Insect poison is one remedy indicated, and its successful use would be a deductive proof, but the vermin are always on

the underside of the leaf, and the application of solutions, &c., is consequently difficult; very corrosive mineral poisons are of course out of the question. The two most active mineral insect poisons are mercury and phosphorus; metallic mercury is not corrosive, and can be applied to plants in a considerable proportion without injuring them. The mode is, to take the unguent of mercury, incorporate it with yellow or soft soap, and make suds of it, there will be little or no sediment of the mercury, providing that it is distributed in the suds which can be thrown over the plants. Cerate or unguent of phosphorus may be applied in the same way, but with caution, as it evolves phosphoric acid gas in the sun's heat; this, if in a dose sufficient to kill the insect without injuring the plant, would be more effective from the phosphoric fumes reaching the under side of the leaves.

The pest first appears when two or three of the lower leaves turn yellow, as observed about the period of flowering. Sometimes these leaves have the black blotch so characteristic of the blight, when it afterwards strikes the whole plant.

Little is known, certainly, about the natural history of the aphides, but like the other parasites, they seem to be self-generated, in the first instance, after which their increase is prodigious. It is said that males are only produced every tenth generation, fecundation being hereditary to that extent, and that the species differ with the plant they feed on. Their presence is indicated by the leaves curling and being occasionally perforated by them. They are a large insect of their class, and easy to be seen without a glass; they are also stated to be viviparous. It is not unlikely that the young brood, in a microscopic state, causes the mischief; however, it is not impossible the disease may be the result of a succeeding insect preying on the aphides.

Everything seems to indicate that the blight is a subtle poison, not the effect of anything feeding on the plant, the sudden large black blotches, the rapid progress through so many widely different organs, and the effects different in each though destructive in all, are such as no creature is known to produce on any other vegetable by the mere process of feeding on it. This is the season for experiment and investigation.

A. B.

#### Miscellaneous.

#### BLANK PLACES IN THE TURNIP FIELD.

Owing to defect in the seed, or to fly ravages there will often be blank places in the turnip field. These to a farmer of