

THE PEAR SLUG.

The slug-worms come to their growth in twenty-six days, during which period they cast their skins five times. Frequently, as soon as the skin is shed, they are seen feeding upon it; but they never touch the last coat, which remains stretched out upon the leaf.

It seems that all of them, however, do not finish their transformations at this time; some are found to remain unchanged in the ground until the following year, so that if all the slugs of the last hatch in any one year should happen to be destroyed, enough from a former brood would still remain in the earth to continue the species."

touched.

ORCHARDS—CULTIVATED OR IN GRASS.

The land is peculiarly adapted to fruit trees, and little care is required, except to keep injurious insects from the trees, and to harvest and market the fruit. Such cases are comparatively rare, however, especially in New England where the land generally needs considerable forcing to make it produce thrifty, healthy trees, capable of bearing full crops of large, handsome fruit.

We would treat the orchards according to their needs. If they need checking we would check them, and if, as is usually the case, they need urging and forcing, we would do that by applying fertilizers in abundance, and by keeping the soil mellow and free from other crops which might injure the growth and bearing habits of the trees.

Mr. Thomas Meehan, of the *Gardener's Monthly*, has been a strong advocate of the plan of keeping orchards in grass, and is opposed to the common theory that trees, to do well must be cultivated like corn or other hoed crops. The following extract from an article of his will indicate on what ground he bases his peculiar theory. Our readers can judge whether their own soil most needs shade or culture:—

"One of the old and long cherished theories of fruit culturists is that trees will not do well without a constantly clean surface. It is conceded that trees will not thrive when the temperature of the earth is much above seventy degrees. At eight degrees the system of the tree becomes weak, and renders the leaves susceptible to the attacks of various fungi and other diseases. And yet the experimenter will find in this region, at least, that soils will protect on the surface of the sun's rays will go over ninety or one hundred degrees. It is very likely after this he will get tired of seeing the leaves of his pear trees fall off before midsummer has hardly gone, and go to protecting the surface in the same way, yet believing, probably, that in "theory," at least, the healthy, clean, sun-roasted surface is the proper way, and the only right way, to grow fruit trees.

grow fruit trees. He may live in a region where, year after year, seedling pears drop their leaves so early in the season that it is impossible to bud them; and he may have to abandon the business to Northern men who can "grow pears." He may take a dozen or so of young seedlings and pack them thoroughly through and about with brushwood, so that it is almost a struggle for the plant to push its way through. He will find the leaves young and healthy, to the last, while those in the clear, clean soil will long have lost theirs; and once teeming land under the crust with a thermometer, will find it about twenty degrees lower than in the other case. He may think after this that it will pay to keep his seedlings in some way, though he still may not care to dispute the theories of those who hold that a clear, clean surface is the beginning and end of all good culture.

This is the season of the year to think of these things. Let every one take his thermometer and try the difference between the shaded ground and the cleared ground, and the difference in health of the trees in connection with the earth's temperature, and he will be surprised how much he will learn. He may, perhaps, be laughed at as a "scientist" by some good, easy-going folks, but he can lay the whole blame of its folly on the *Gardener's Monthly*, who will cheerfully bear the ridicule for its dear readers' sake."

BLACKBERRIES.

TRANSPLANTING.

Always see that the soil is thoroughly moist in the pots, if not it is difficult to turn the plants out without breaking the roots and the old ball of soil will remain dry after frequent waterings. Make the soil thoroughly firm around the roots for them to strike at once into the fresh soil; if necessary to water the plants after planting, do it with a spout, not wetting the soil all over the ground; this only cools the soil without giving the plants any benefit, and the soil is seldom dry far below the surface at this season.

If the beds were well turned up in the fall, which should always be done, at the same time adding any fresh soil or manure required, nothing more will be required but stirring up with a fork, which should be done in a few days before planting, to allow the sun to warm the soil. We shall infer that it has been previously decided how the most prominent beds are to be planted, and the requisite number of plants prepared for each, so we have nothing to do but bring the plants out and plant them at once, for the less time pot plants are standing about before planting the better, as in a very short time they get dust dry and the roots suffer. We mention this from noticing very enthusiastic amateurs taking out a quantity of plants in the morning and leaving a number unplanted until perhaps the next day, and then planting them when the pots were dust dry.—*Horticulturalist*.

OLD STRAWBERRY PLANTATIONS.

If they have borne two full crops, plough them under. We do not believe that it will pay to raise over two crops of strawberries from one planting, and many of our best small fruit growers only take one full crop, knowing that they will diminish in size and yield thereafter; but if well matured when planted, and kept clean at all times, the second one may pay.

Let us examine the plants in a strawberry plantation at this season of the year, when a large crop of strawberries has just been gathered.—If the plants have been kept in stools—the runners all removed—those stems which have borne fruit are exhausted, and die, and so do the roots employed in feeding them; but from near the crowns of those roots new roots have started, which either have thrown or will soon throw up new stems to form the basis of next year's crop.

Some practice cutting off and removing the old stems and leaves, just as we do the old exhausted raspberry canes after they are through bearing, and believe that the new ones start up fresher, and grow more rapidly in consequence, and we have certainly seen good results from such a course, but whether we cut off the vines or not, the ground between the rows which has been compacted by many feet, should be broken up mellow to the depth of three to five inches, and all weeds and grass cleaned out.

If the ground is not very hard, perhaps one of the improved cultivators or grubbers would be the best implement for mellowing

If the strawberries have been kept in narrow matted rows, the spaces between them should be broken up, and the rows themselves cut down quite narrow, and cleaned out. Sometimes the workmen may run the plough just under the original plants, and leave a row of fresher ones on one side of the old one. Where this can be done, it will give you a more vigorous plantation for next year's crop.

After the plantation has been put in good order, you would have a stronger assurance of a good paying crop next year, if you should apply a top-dressing of fine, concentrated manure.

A good article of superphosphate, or bone dust, could be easily scattered along the row, and would probably repay cost several times over in the next crop of berries.

The directions here given for the management of market plantations will apply equally well to the family garden patch, only substituting the spade for the plough in breaking up the ground.

If the reader comes to the conclusion that a good deal of labor is involved in the proper cultivation of the strawberry, it will be a correct conclusion, but then none but the best cultivation pays. Our best cultivators make some money in growing strawberries for market, but half cultivators make none. —*Ann. Rural Home.*

TO PRESERVE GREEN GRAPES.

MESSRS. EDITORS:—A very simple and successful method of preserving the green grapes of wild vines, is one employed in this State, which may be interesting to some of your readers. The grapes must not be too old; the best time is just before the seed begins to harden. They are, after being picked and freed from stems, put into bottles (strong wine or champagne bottles are best) so as nearly to fill the latter. These are then filled with fresh and clean water. After this they are all placed in a large kettle, partially filled with cold water, and the temperature raised nearly to the boiling point. The water in the bottles expands by the heat, and part is driven out. As soon as sufficiently heated, they are taken off, enough water poured out of each bottle to merely allow a well-fitting cork to be pressed in tightly. After being corked they are sealed up with sealing wax or common beeswax. As the bottles cool down a partial vacuum is left in the neck of each.

vacuum is left in the neck or can.

Grapes thus preserved have been kept for years in this climate, while canned fruit almost invariably spoils during the hot summer.

They can at any time be opened and prepared like fresh grapes, and no difference will be found in the taste. It is better to use the water, also, in which they were kept, as it contains a large percentage of tartaric acid, which gives them the pleasant sour taste.

I hope some will try this method and profit by it.

A. F.

WHAT IS THE BEST MANURE FOR APPLE TREES.

E. W. Paine, Shelter Island, N. Y., writes as follows:

"I saw by the *New York Times* that the question was asked—'What is the best manure for apple trees?' I have tried several kinds, and find that by taking off the soil around the trunk, say two or three feet down, or nearly to the roots, and putting on any bones which go from the kitchen, which I save for that purpose, covering and letting them decay, that this feeds the trees sufficiently. I tried the experiment on some, and found that they grew four times as fast as the others, and yielded abundantly. One of my neighbors dug a trench around some of his that had never bore anything, and put into it two inches of bone dust. The same trees have borne ten bushels a tree ever since. I have, by grafting in the ground, got fruit in three years, which has been my common practice. I take sweet sugar apples and graft on a sour stock, and get beautiful and sweet-tasting apples. I have some that are as white as this paper, grow large and keep well—better than any I have ever seen."