

very cool house, the cultivator thinking they should be kept dry because the house was colder than such usually are. The treatment might not have had a bad result with many plants, but it killed the Camellias. A healthy-growing plant in a pot, which is, as it ought to be, thoroughly well drained, cannot well have too much water when it is watered. Our golden rule is: *Do not water a plant till it requires it, and then give a thorough soaking.* We are now dealing chiefly with greenhouse and conservatory plants, about which most enquiries have been made; but the rule is equally good for stove and pot plants in every structure. In hot summer weather, plants should be examined every morning, and in most cases watered; and in the case of free-growing Fuschias and other soft-growing plants in the height of their bloom, it may sometimes be necessary to water well twice a day. In the dead of winter, every second day is sufficiently often to look over greenhouse plants, and then not one in ten may require watering. The waterer should begin regularly at a certain place in the house, and examine every plant. After a little practice, he can readily detect those that are dry by merely looking at the soil; but in some cases, where the specimens have been top-dressed, &c., and soil without roots in it lying on top of that full of roots, and where bad watering has been practiced, so that the earth is wet on top and dry at bottom, it may be necessary to strike the pot with the knuckles to see if it sounds hollow, this indicating want of water; and now and then to turn a specimen out of its pot to examine the state of the roots. When a crack is seen between the soil and pot, caused by the shrinking of the soil, it is an almost invariable sign that the plant wants plenty of water.

When the operator meets with a dry plant, instead of pouring a little water on, as many do, he should fill it up quite, and if there is not a good space for water between soil and top of rim, he should return to it and fill up again, so as to insure a thorough soaking, for a plant wet at the surface, and dry as dust down where its main roots exist, is in the worst possible condition. In fact, it is not a bad plan to make it a rule to water gross-feeding and large specimens twice when they get dry. The great harm used to be in old times (and very often, we fear, in those advanced days) by pouring on a little sip every morning, which resulted in the pots becom-

ing covered with green slime, and the soil often a mass of black mud. The same regular examination should occur in summer, only less care will be required, and four times the amount of water. When rapid growth begins in the first bright days of March, too, the plants must be looked over every morning, and from that time to the end of October. Some people fill the pots with too much soil, and do not leave sufficient space for a proper dose of water to be poured on; it is a very bad plan, and has caused the death of hundreds of valuable plants. As a rule, the pot should not be filled higher than within half an inch of the brim. When settled down there will then be sufficient room for water, and sufficient opportunity to give a good drink at once—not watering again till the plant really wants it. One good watering in mid-winter will often suffice a healthy specimen plant in full leaf for two or three weeks; ten weeks later it may require one every day.—*The Field.*

#### CROPS AMONG FRUIT TREES.

The great importance of keeping fruit orchards in cultivated crops for the first ten or fifteen years is not generally understood. You may take two tracts of land of equal fertility and set them to fruit. The one shall be kept in plowed crops constantly for twelve years, and the other shall be kept the first three in plowed crops, and the next three in grass, and so alternated for the twelve years. At the end of that time, all other things being equal, the tract that has been kept constantly in plowed crops will contain trees twice the size and vigor of the other; and if you should commence with putting your orchard to grass for the first three years, the result would be that you would dwarf and stunt your trees so as to make them about worthless. If any person doubts this, I should be happy to give him illustrations of the truth of it, that I think would satisfy him.

#### GRAPE-GROWING.



WITH all our experimenting, and after all our discussions on the subject of grape-growing, we have not advanced much in the way of practical knowledge. Scarcely two growers agree upon any one particular mode.

They not only do not agree, but many of them differ radically.