esting account of "the philosophy of mulching," a point on which little has been written. He observes: Downing says, "by preventing evaporation it keeps the soil from becoming dry." This is the general theory, right as far as it goes, but is far from expressing the whole truth. Mulching is actually watering. It is providing a constant and ample supply of moisture. It does more than this; it provides a constant supply of fertilizing matter. Some years since, observing the remarkable effects of mulch, the writer tried some experiments, which to his mind, tended to throw some light upon the mode of its action. Perceiving that a heavy mulching of saw-dust produced all the apparent effects of heavy manuring, and kept the ground moist in the driest season, the bulb of a thermometer was sunk to the bottom of the mulch, and the mercury fell ten degrees. This demonstrates to my mind the cause of moisture and fertilizing. The mulch being always porous, permits the free circulation of the air, and being ten degrees cooler than the general atmosphere the moisture of the air is condensed. This accounts for the constant moisture of the earth under it, even in the driest season. The fertilizing matter of the air consisting of the ammonia, and carbonic acid, are deposited by the condensation of moisture under the mulch. We are familiar with the fact that frequent stirring of the soil, in a dry time will prevent injury to a crop for want of rain. This acts upon the same principle as the mulch. The soil being kept porous receives its moisture by condensation from the air. Nitre is often gathered from the earth in damp, dark cellars, and from under rubbish which has been long undisturbed, and it was deposited there in the same manner as under the mulch.

Mulch has another remarkable quality. It will render the hardest and most compact earth loose and porous in a few months. The benefit of summer fallow is based upon the free circulation of air through the soil, caused by many ploughings. If the soil is left unused, but without stirring, it becomes compact and little or no benefit arises from a year's rest. If the ground were mulched, it would need no ploughing to produce the same benefit. It is recommended by some horticulturists to remove the mulch in September, for a time to prevent too much water from being taken up between the bark and the sap wood, which it is said, will freeze in winter, and cause the frozen sap-blight; the mulch may be returned at the commencement of the cold weather This may be done by those who believe the winter-blight thus produced. But let no one forget to mulch who has anything to do it with.

DWARF APPLES.

Any variety of the apple may be dwarfed by grafting it on the Paradise or Doucain stock;—the former makes a smaller tree, but comes quickly into bearing; the latter is larger, and though longer in fruiting, will alternately afford the heaviest crops. While any variety of the apple may be thus treated, there are some kinds which are more suitable than others for dwarfing. Among the best sorts for dwarfing are the Red Astracan, Jersey Sweet, Baldwin, Dyer, Summer Rose, Benoni, and Bough. As an ornamental object in a garden, what can be prettier than one of these apple bushes covered with blossoms, or laden with fruit? Dwarfing makes no difference as to the size of the apple product; it only affects the size of the tree, while the fruit is as large, and in some instances even larger, on the dwarf stock than on the standard.

The chief advantages of the dwarfing process are:—1. Economy of space. A tenth of an acre may be planted with forty or fifty trees without crowding. 2. Greater suitability of the trees for town and city gardens 3. Easy access to the fruit. 4. Early bearing. This is the chief recommendation of the dwarfing system. Trees thus treated will begin to bear the third