

## GARDEN AND ORCHARD.

## WATERING PLANTS.

We publish the following from the London Mark Lane *Express*, not because it is new, but to show that culturists, the world over, are agreed upon the principles that should govern in watering trees and plants:

"Daily morning sprinkling under the influence of the sun, which is increasing in power every moment, is worse than useless, as the rapid evaporation that follows lowers the temperature of the ground so much as to be positively injurious, and the very fact that the surface dries so quickly proves to demonstration that the moisture is not appropriated by the plants or crops, but by the atmosphere. This is not exactly what is wanted; in fact is the exact opposite, as it is for the plants and not the air, that the moisture is intended. Watering to be effectual with out-door crops should be done in the evening. There is little or no evaporation then, and consequently the crops have at least several hours to appropriate the moisture that is given, and become refreshed for the work of the following day.

"A sound rule in the watering of plants and crops is to wait until they require artificial support, and then to give it copiously; It is of no use applying water unless sufficient is given to penetrate to the roots of the plants, and even below them. Numbers of persons are under the impression that they give sufficient for this when in fact the water may not penetrate half an inch; it runs off the surface instead of percolating through it. This is sure to be the case where daily sprinklings are indulged in on the principle of giving every part of the garden a little. It is far better to divide the garden into sections and give each in turn an adequate supply, even if the whole be not saturated more than once a week. With the object of assisting the water to pass through the dry surface it is often necessary to break it up slightly with a fork, and it is always desirable to run the hoe through the surface on the following morning, as soon as it is dry enough to be worked freely, as this will to a very important extent arrest evaporation, and assist materially in the retention of both warmth and moisture in the ground.

"Our remarks apply to plants and crops that are established and not those that are immediately planted, which often need watering daily and sprinkling frequently to prevent withering; but even in the case of these artificial shade, when it can be given, will be far better than the incessant use of the water-pot. Beds in which seeds are sown can seldom be watered beneficially. If sowing must be done in dry weather, the proper method of supplying the requisite amount of moisture is to flood the drills before the seed is scattered in them, and shade the surface until the seedlings appear. For instance, the present time is the time for sowing peas, for the latest crops; coleworts, for occupying vacant ground after the early crops are removed; and cauliflowers and lettuce for autumn use. Let the drills be first saturated, and the seed will germinate far better than if it is sown first and watered afterwards. This is a simple item of information not commonly found in books, yet worth remembering.

"Roses, deciduous and evergreen shrubs, and also fruit trees that were planted late in the spring, will in dry soils, need watering now. Let it be given liberally, as much as can be poured into the soil, and in the morning dust over the surface, or it will shrink and crack and much of the water escape into the air again. Trees and plants inserted close to walls must have special attention, as the soil dries there more quickly than in the open. Mulching is an invaluable adjunct to wat-

oring, and two or three inches of cocoa fibre refuse, which is very cheap, spread on the soil, has a neat appearance, and is an efficient conservatory of moisture in the earth."

## WILD GARDENS.

A growing and commendable feature of ornamentation is the constantly increasing introduction of wild gardens on private grounds. It is always praiseworthy to make the most of the plants of one's own country, and especially those of his State or neighbourhood. The wild garden receives more attention in Europe than in America, although it seems to be constantly growing in favour in this country. To the farmer the value of a wild garden lies chiefly in the ease with which it is cared for, and in the adaptability to that purpose of any waste or wet piece of ground. A wild garden is necessarily a rustic affair, where vacancies and irregularities do not mar its general effect. It needs little care other than to keep down some of the more troublesome weeds, and to prevent the stronger plants from crowding out the weaker ones. The previous vegetation should be thoroughly subdued, however, before even a wild garden is attempted. If the land is low it will probably be occupied by a strong sod of sedges or grasses which must be entirely eradicated before one can expect pleasant results from transplanted species. The next important problem is to secure plants which will thrive in the selected location. This is best done by removing plants from places which have a similar amount of moisture, and the same exposure to winds and suns as has the spot selected. This is a pleasant work for most children. Every child should early learn to love and observe some class of natural objects, whether plants, birds or insects it matters little.

The familiarity with living objects is a great educator. If properly pursued one gains a power of discrimination and observation from a study of plants or birds or insects which he can get in no other avocation. The detection of wild flowers for a garden is one of the very best means of inducing this desirable liking for nature. Were this made the sole object a wild garden might be made a source of great profit to children and to home. How to amuse and busy the children when father and mother are not at leisure is a problem which may often find a solution here. Aside from this educational and salutary aspect, however, a wild garden may be made a charming, attractive place. Most or all of the plants will be perennials, and there will be no trouble in keeping good roots of most of them, especially if lightly mulched each autumn. Of course, a wild garden should not be in a conspicuous place. All rough and rustic features of the premises should be hidden from the road or front yard. This will especially be the case if the wild garden is built up largely with rocks.

## APPLE CULTURE.

Prescott Williams, of Williamsburg, Mass., who has given a quarter of a century to apple culture and now has twenty acres in the fruit—about 1,400 trees in all—had one of the largest crops last year the orchards ever produced. It reached about 800 barrels. These trees are expected to reach a bearing capacity of 2,000 barrels. In the next ten years the income from the twenty acres is estimated at \$2,000 a year. The land is like all that adjoining, and Mr. Williams considers it all good for apple culture. The peculiarity of his method is that he digs a hole five feet square, in which the young tree is set, and it is then filled around with good and well made compost. The orchards are never ploughed, for he has found the

little rootlets come to the surface for nourishment. The windfalls and decayed fruit are all removed. The tree is cut to grow low, with wide-spreading branches, thus avoiding much of the danger from high winds. Mr. Williams has this year observed for the first time a difference in the shape of the Baldwin trees that bear in the odd and the even year. The difference is quite noticeable when it is once pointed out. The even year has long and slender branches reaching out in all directions, while the odd tree is more scrubby, the branches growing closer together on the top. These facts may be of much importance to those who wish to graft the Baldwin. Like many other fruit-raisers, Mr. Williams has come to the conclusion, as a result of his long experience, that only a few varieties of both apples and pears are profitable to raise. He would not set more than three varieties of pears, and, if he were to set an orchard of a thousand apple trees, he says he would set only the Baldwin and the Lady's Sweeting. The latter is a winter sweet, light red in colour, very handsome, and a profuse bearer.

## RAISING FOREST-TREE SEEDLINGS.

D. W. Beadle, secretary of the Ontario Fruit Growers' Association, gives the following directions how farmers may grow forest trees from seed, in which he doubtless speaks from his own experience:—Now that the planting of timber-belts, both for timber and protection, is likely to prove desirable, these directions may be generally useful. Prepare a small piece of ground by enriching and pulverizing, and plant the seeds as soon as may be after they are perfectly ripe. The soft maples and the elms ripen their seeds in June, and by sowing them at once, strong plants may be had before winter. They should be covered lightly, or with only enough fine earth to keep them moist. The sugar maple ripens its seed late in autumn, as well as the ash-leaved maple. They may be sown in autumn, or kept in moist earth for sowing in spring. If kept in papers, they will become so dry as to be likely to fail of germinating. The large seeds of the butternut, chestnut and walnut, ripen late in autumn, and they may be planted as soon as gathered; or they may be mixed with soil to keep them moist and prevent moulding, spread in a thin layer, and covered with soda, for early spring planting. It is not necessary to expose them to frost, but to keep them from becoming dry. All these trees may be grown in nursery rows till large enough to set out in belts.

## AMPELOPSIS OR VIRGINIA CREEPER.

The common Virginia creeper, or as it is often called, "woodbine" and "five-leaved ivy," has long been held in esteem as one of the most desirable of hardy climbers. It is easily grown, and very soon covers a wall or other object with a dense mass of green. One of the most attractive features of the plant is its habit of assuming rich tints of red and orange in the autumn. The Virginia creeper is a common plant in woods in the northern United States. It is the only native woody climber which has five-parted leaves. It can readily be distinguished from the poison ivy, which has wider, three-parted leaves. The creeper is a near botanical relative of the grapes, its flowers and fruit having almost the same structure as they.

Another desirable climber, introduced some nine or ten years ago from Japan, is that known as Veitch's *Ampelopsis* (*Ampelopsis Veitchii*). In many respects this species is superior to the native Virginia creeper. Its most marked superiority is the readiness and tenacity with which it clings to a wall. In taking plants of the Virginia creeper