Kerosene for Borers.

The destruction wrought by borers among our shade and fruit trees becomes more wide spread every year, and every apparently successful attempt to check their ravages will be heard of with pleasure by all, for all have an interest in the preservation of the trees that shade our homes in town and country; and there are none who do not prize the mellow or delicious *magnum bonum* or Duchess Dangouleme, beautiful and luscious, fresh plucked from the trees. The following letter to the *Prairie Farmer* tells us of a successful application of kerosene for the preservation of trees. We would like to hear of further experiments for the purpose.

"The borers have been troubling us here for several years, more particularly near Chicago, where the maples have been destroyed in great quantities. It remained for the year 1874 to show us their destructive power. You remember that year was the hottest and dryest on record. The borers then made terrible havoc with our trees. All the mountain ash were destroyed, about four-fifths of the soft maples, two-thirds of the elms, and one-half of the ash-leaved maples. The true ashes, willows and poplars were not attacked. A great many trees were killed by the dry weather. I think not a single tree of the kind they attacked escaped without more or less injury. We came to the conclusion something must be done to destroy or counteract the borer, or that we must stop planting trees.

"We found that in this section the mass of eggs were laid from the last week of May to the first week of July (inclusive), on the south and south-west side of the tree, seldom on the east and never on the north side. A shaded tree they do not attack, unless it is dying or dead. To shade all our trees was impossible. Soap, if properly applied, we found would keep them out, but would not destroy them once they had obtained a lodgment; we found also that a fresh application had to be made after each hard rain to be effectual.

"Being told that an application of kerosene would be effectual, we determined to try it, but as no one appeared to be thoroughly posted as to its effects upon the trees, some affirming it would kill, while others thought not, we concluded first to test it with two soft maples, just at the time the leaves were starting. We cut the bark of one of these in several places, the other we left entire. We saturated them with kerosene on the south and southwest sides. During the first week the kerosene was distinct to taste and smell; during the second week a slight trace only could be perceived, which entirely disappeared the third week. The buds which were touched by the kerosene were killed, but new buds at once pushed out and grew vigorously, and the trees grew as well as others in the nursery. We applied kerosene the middle of June to over four thousand trees, with apparently good results. The trees grew well and have commenced healing wherever previously attacked. There was no sign of a borer on trees washed with the kerosene; even where the trees were dead, the bark was stripped off and no sign of the borer seen. We shall continue the experiment this year (1876), and note the result. A number of trees were planted on the north and east side of a board fence, and some directly opposite on the south and west side; those on the south and west side were attacked in proportion to those on the north and east side as three to one, yet the only difference was the partial shade afforded those on the north and east.

"Notwithstanding the foregoing facts, I would not recommend the indiscriminate use of kerosene until the experiment has been more thoroughly tried. C. THOMAS."

Brilliant Foliage in Plants.

In the village of Union Springs, New York, a tree planting society was formed many years ago, and several hundred trees of the Sugar and Red Maples were planted along the different streets. Nearly every autumn these make a gorgeous display of crimson, scarlet, pink and orange, in an almost endless number of shades and different modes of blending. The absence of frost till late in autumn, owing to the proximity of Cayuga Lake, increases the effect. There are two or three trees of surpassing splendor, which maintain this distinction every year. Why would it not be as desirable to give a brilliant termination to the foliage of the season, as to plant for the two or three days of the blooming season in spring?—*Cultivator.*

The Codling Moth.

In Prof. A. J. Cook's paper on the codling moth, read at the Michigan State Pomological Society, a brief notice of which appeared in the *Western Rural* for Dec. 19th, he said that the bands should be placed on the trees by June 20th, as very soon after that date the larvæ will commence to leave the apples. The first examination of the bands should be made the first week of July. Every varieties of apples are first attacked by the moth, and bands on the Early Harvest, etc., should first be examined for the larvæ. The examination should be made at intervals not greater than ten days, as this will cover the briefest period of preparation.

Experiments made during the excessive heat of last season showed that an interval of twelve days between the examinations was too long, as many empty pupa skins were found. As the first brood are developed by the last week of August, and as the second brood do not leave the cocoon until the next year, no examination need be made after the last week of August, until nearly winter, when a very careful examination should be made by unwinding the bands and crushing all larvæ and pupa with the fingers.

Without the removal of the rough bark by soaping and washing, the bands cannot be effectual. The removal of all rubbish from beneath the trees is also important. Those who have not yet used the bands should seek out and destroy the larvæ under the rough bark, and in all other places where they may be found.

The paper closed with an amended summary from Prof. Riley's third report on injurious insects, as follows: There are two broods of codling moth every year; the second passes the winter within the cocoon in the larvæ state. Use sheep or hogs on the orchard whenever it is possible to do so. Put no confidence in lights or bottles, but rely on bandages. Have these in place by June 20th, and destroy the cocoons, larvæ and pupa underneath them every ten days, commencing as early as July 8th, and continuing until August 30th, and again at the close of the season after the fruit is harvested. As soon as the ground thaws in spring, destroy all insects within cocoons found around storehouses or under bark where trees were not bandaged the previous year. Urge your neighbors to combine with you in your work.

Two Requisites for House Plants.

One of our lady readers remarkably successful with her house plant in the winter season, gives us two points in their management. Every gardener and florist knows the value of what is called "bottom heat." A warm atmosphere—especially if a dry one—is often sufficient to bring about healthy growth, and is sometimes injurious. What is wanted for many kinds of plants and flowers, is *moist heat at the roots and fibres*, where growth early starts, and from which the stimulus is conveyed to every other part of the plant. A thrifty growth below the ground is sure to be followed by fruit and flowers above.

Our lady friends accomplishes this by filling the saucers of her flower-pots *with hot water*. This is, of course, absorbed and carried up to the roots and fibres, giving the required bottom heat. Unthrifty plants, in addition to this, she places on the mantle-piece over the kitchen range; keeping them, of course, well watered. It supplies heat where it is most wanted—at the roots—and the benefit is marked. In warm rooms the higher temperature is at the top, and the coldest near the floor, where the pots are. This reverses the proper order, giving the roots of a plant the coldest place.

Another important matter in house plants is to give them the morning sun. Windows, where flowers are kept, should, therefore, face the east. The reasons are not known, perhaps, but the fact is patent to all whose business it is to develop healthy growth in plants and flowers, that an hour of morning sun is worth three hours of afternoon sun. Every one observes this, and it may be owing to some increased electrical action at that time.—*Practical Farmer.*

CURING HABITS OF SOME PLANTS.—The Goat's Beard, *Tragopozon pretensis*, will not expand its flowers in cloudy weather. From its habits of closing its flowers at noon, it has received the name of Go-to-bed-at-noon, and in England, in many places, the farmers' boys regulate their dinner hour by the closing of the flowers of the goat's beard. The lovely *gentianella* opens its blue eyes to greet the midday sun, but closes them against a shower. The stems of trefoil intimate the approach of rain by swelling and growing more upright than at any other time.

Common Mistakes.

What a common mistake it is, among even some of most intelligent men, to select low, sheltered warm places, if possible, whereon to lay out their orchards, quite forgetful of the fact that, by so doing, they are laying their fruit and other trees all the more liable to the ravages of frost. This may seem paradoxical, but let us examine the philosophy of it. On the hill where the wind blows freely it tends to restore to plants the heat lost by radiating, which is the reason that hills are not so liable to sharp frost as are still valleys. When the air is cooled it becomes heavier, and, rolling down the sides of the valleys, forms a lake, so to speak, of cold air at the bottom. This adds to the liability of frosts in low places. The coldness is still further increased by the dark and porous nature of the soil, in low places, radiating heat faster to the clear sky than more compact upland. A knowledge of these properties, therefore, teaches us the importance of selecting more elevated localities for fruit trees, and all crops liable to be cut off by frost; and it also explains the reason why the muck or peat of drained swamps is more subject to frosts than other soils on the same level. Therefore corn and other tender crops upon such porous soils must be of the earliest ripening kinds, so as to escape the frosts of spring by late planting and those of autumn by early maturity.

Fruit Growing in Ontario.

Mr. E. Smith, Grimsby township, raised, the past season, on 24 acres of ground, 375 bushels of apples, at 80 cents; 200 bushels of peaches at $2 per bushel; 13 bushels of pears at $2 per bushel; 30 bushels of cherries at $1; 3 bushels of plums at $1.50; 250 bushels of grapes at $2; 30 bushels of beans at $2; 700 bushels of onions at $1; 200 bushels of beats at 50 cents. 225 bushels of carrots at 25 cents; 500 bu hels of turnips at 25 cents; 175 bushels of potatoes at 75 cents; 50 bushels of cucumbers at $1; 50 bushels of tomatoes at $1; besides 100 bushels of buckwheat at $1; 7 tons of hay at $12 per ton; 3,000 water melons at 13 cents each, making in all 3,000 bushels, besides the hay, musk and water melons, amounting altogether to the value of $3,492, being over $145 per acre.

Transplanting Evergreens.

Why writers on horticultural topics should, with almost one accord, advise planting evergreens later in the season than deciduous trees, is something that I cannot understand. The frost is barely out of the ground, but I have begun to transplant evergreens; this has been my practice for the last twenty years, and I do not believe any advocate of late planting was ever more successful. Trees put into the earth in time to receive the benefit of heavy spring rains in settling the soil about their roots, are more likely to live than if the operation is delayed until later in the season, all the fine theories to the contrary notwithstanding.—*Cor. Rural New Yarker.*

OXFORDSHIRE DOWNS.—The face and legs of an Oxfordshire Down sheep should be of a nice dark color; the poll well covered with a top-knot on the forehead; the fleece should be thick on the skin, of moderate length, but not too curly. The average of a well bred flock in wool should be 7 lbs. per fleece; rams of this breed will not unfrequently clip as much as 20 lbs. each. Combined to a round, well-formed barrel, there is generally considerable length and immense substance of frame. Tups are sufficiently wealthy in grazing characteristic as often to develop carcasses weighing from 20 to 25 lbs. a quarter ere twelve months old. The mutton partakes of the closeness of texture and good quality of the Down, while in bulk it well nigh equals the immense joints of Cotswold sheep. That such animals should be in high favor amongst graziers is what naturally might be expected on all soils sufficiently fertile to maintain the affluence of such a productive sort in full development. Oxfordshire Downs answer best for mixed soils, consisting of good heavy, or light loams, but with management and tolerable high feeding, they are adapted to prove more remunerative than most sheep under other circumstances, and over rather a wide diversity of districts. I fully expect to see them extend, ere long, much further than they have hithert done, as they answer so fully the wants of English farmers, in combing large quantities of best quality meat and wool; to be obtained, too, without any detracting features involving either loss of time or sacrifice of food.—*London Live Stock Journal.*