## Garden, Orchard and Forest.

### Evergreens in Protecting our Orchards.

At the June meeting of the Michigan State Pomological Society, Mr. Lyon, the President of the Society, said on this subject :—

"When I came to this lake shore there was a prevailing opinion among the orchardists here that no protection was needed from the wind, that the sooner the timber was removed entirely between the lake and the orchard the better. The lake was looked upon with the most perfect trust as a mother that would protect from any kind of a blast, and the less obstruction between her and the fruit trees the better. But judging from the growing practice along the shore, I am convinced that there is a conviction among the people that a shield of tree growth of some description is a necessary accompaniment to successful fruit culture. If we require something of the kind here, where location near so large a body of water is so much in our favor, how important a matter it must become farther inland where they have no such modifying element! The full force of our strongest winds has power to do incalculable damage in many ways. It injures foliage, drops the fruit, breaks off limbs and buds, piles up the sand, and in various other ways troubles the orchardist. I have in mind now an orchard that in 1873 took the first premium in its class; it is exposed to the full force of the wind and has the entire breadth of Lake Michigan to modify the temperature of the air moving from that direction, but the orchard is a ruin, while others that might be considered less favored from their distance from the lake, remain in good vigor. The question recurs to what will we do in this matter of protection, and if we use evergreens, how shall we employ them? Evergreens are of slow growth generally, and those recently planted can be of very little benefit as a protection, so that the return for expenditure is not an immediate one. My own plan would be not to confine the planting to evergreens solely, but to use some quick growing deciduous trees in connection therewith. The Lombardy poplar is no friend of mine; I never was enamored with its habit of growth, but it develops so rapidly that in the case mentioned with evergreens it might be admissible until the evergreens get sufficiently developed to serve the purpose for which they were planted. Of course soil and location will have everything to do with the selection of appropriate trees for this purpose. It must not be forgotten, too, that evergreens until well up in the world will not stand the blowing sand or severe winds, and therefore require themselves the protection of hardy deciduous trees for a time. However, after attaining some size, the evergreens usually employed are quite hardy and serve an excellent purpose. Among varieties I would select for the purpose of protection, is first the Norway spruce, which seems wonderfully adapted to all soils in our State. Upon light soils the white pine is a quick grower comparatively, and forms an excellent barrier, and is very beautiful. For lower growth arbor vitæ is good, and our native hemlock is most beautiful of all."

### Thinning Fruit.

The *Michigan Farmer*, in notes of the Michigan Agricultural College Farm, says :—

Here is one useful experiment which exemplifies the effect of the thinning of fruit in summer, to which we have often directed attention. There is no part of the farm that receives less attention than the orchard and its fruit. There is no care given to the trees, and the quality of their fruit. There is no attempt made to thin out the fruit, and to thus grow a better and higher quality of any variety. Last year Prof. Beal caused a number of the Northern Spy apple trees to be severely thinned of their profusion of young fruit, with the intention of trying whether the bearing year could not be changed. Every other year a profusion of fruit was gathered, and the off year there was a scarcity. Well, here in the orchard there was a large number of Northern Spy apple trees, several of them had been thinned last year, which was thir bearing year. Every tree that had been thinned of its fruit last year, was bearing a fair average crop of fruit this year, and the trees that had not been thinned, but let alone as is the usual custom of orchardists, were standing next to them without any fruit on them. To Mr. Beal this proved that the bearing year could be changed, or at least sustained that theory as shown by some pomologists; but still it would not be satisfactorily settled until the trees had had time to show by their future crops that the change had been established. But with such a season as last year, when fruits were so plentiful, and every orchard and tree bore with a profuseness that seemed as universal as an epidemic, here were trees that had been checked at an early date by taking off fully one-half of the immature fruits soon after they were formed, and this year their crops of fruit were a fair average.

### The Canker Worm—Another Remedy.

A gentleman writes as follows concerning this pest and the way of ridding trees from its ravages:

The people of this village who have apple trees are just now in ecstacy over the newly discovered means for capturing the canker worms, and the process is so simple yet so effective that it should be known and thoroughly used wherever that pest has made its appearance. For a few days past a gentleman has watched with vexatious regret the progress of devastation upon his fine fruit trees and was about to apply the axe as a remedy, when noticing how easily the worms are beaten or shaken off the tree, experimented to prevent their return and found that fine, dry ashes, lime or plaster heaped around the trunk of the tree would surely prevent their ascent, and being voracious eaters they soon perish on the ground, or may be readily gathered up and destroyed, as they collect in multitudes, attempting to climb up the lime and fall back without reaching the firm bark of the tree. The plan has been satisfactorily tested, and the lime heaps about the trees in nearly every garden show the determination to preserve valuable fruit by thus arresting the blighting scourge. A steep slope around the trees may be made with dirt, then cover with fine ashes or lime, and scatter up a little on the bark, and the worms are effectually stopped. They cannot climb up a loose, dry, floury substance. The worms are nearly done eating for this year, but it will be worth while to apply this remedy in season next year.

### Flowering Hyacinths in Moss.

Peter Henderson says in the *American Agriculturist* that most people "who have cultivated hyacinths and other Dutch bulbs, know how to manage them when grown in ordinary soil in pots, or in glasses in water, but few are aware that they can be grown better in moss, (Sphagnum), than in either. This moss is found in many of our swamps, and is largely used by florists and nurserymen for packing plants to send to a distance by mail or otherwise. Its light, sponge-like qualities are such as the roots of hyacinths and other bulbs delight to revel in, and in which they grow luxuriantly. The moss may be either used to fill pots, window-boxes, or wire or other basket. A wire basket in which four or five different varieties of hyacinths are planted, presents a very attractive appearance when suspended in a window or other part of the room. In filling the moss into the pots, boxes, or baskets, it should be pressed moderately firm, and the hyacinths planted with one-third of their thickness above the surface. After planting, the moss should be watered sufficiently to thoroughly saturate it, and after the surplus water has run off, the baskets or other receptacles are to be placed away in some dark, cool place, such as a cellar or dark closet, where the temperature does not exceed 50°. In five or six weeks after planting, the moss will be found to be filled with roots, and the bulbs may then be taken from their dark quarters into the light; and if kept in a temperature of 60 or 70 degrees, they will flower abundantly in three or four weeks after; the moss must be kept moist at all times. The flowers of the hyacinth will be greatly increased in size and brightness of coloring if they be watered with guano water once a week. This should be very weak, one pound of guano to fifteen or twenty gallons of water, or a pound of sulphate of ammonia may be used instead of the guano, in the same quantity of water. The advantage of using moss for hyacinths, &c., is in its lightness and cleanliness in handling.

"The wire baskets, especially when filled with moss, present a much more pleasing appearance than they would if filled with soil. The bulbs may be planted from October to January; by planting at intervals of two or three weeks a succession of bloom may be had from January to May."

### What the Birds Accomplish.

The swallow, swift, and night-hawk are the guardians of the atmosphere: they check the increase of insects that otherwise would overload it. Woodpeckers, croopers, and chickadees, &c., are the guardians of the trunks of trees. Warblers and flycatchers protect the foliage. Blackbirds, thrushes, crows and larks protect the surface of the soil; snipe and woodcock the soil under the surface. Each tribe has its respective duties to perform in the economy of nature; and it is an undoubted fact that, if the birds were all swept from the earth, man could not live upon it, vegetation would wither and die, insects would become so numerous that no living thing could withstand the attacks. The wholesale destruction occasioned by the grasshoppers which have lately devastated the West, is undoubtedly caused by the thinning out of the birds, such as grouse, prairie hens, &c,, which feed upon them. The great and inestimable good done to the farmer, gardener and florist by birds is only becoming known by sad experience. Spare the birds and save your fruit. The little corn and fruit taken by them is more than compensated by the vast quantities of noxious insects destroyed. The long persecuted crow has been found by actual experiment to do far more good by the vast quantity of grubs and insects he devours than the little harm he does in the few grains of corn he pulls up. He is one of the farmer's best friends.

### Watering Kitchen Gardens.

This is a subject to which more than ordinary attention should be paid, inasmuch as in many districts kitchen garden crops suffer considerably from drouth during the dry summers. Therefore, in choosing a site for a new garden, the means by which it is to be watered during dry weather must not be overlooked. In some parts artificial watering is seldom resorted to, nor is it needed; but in naturally dry localities deep cultivation affords in some measure a substitute for the watering pot. Unfortunately, however, deep soils do not everywhere exist, and in such cases arrangements should be made for supplying water in some practical manner. Where there is a running stream, as sometimes happens, advantage should be taken of it to irrigate the garden; but where this is impracticable, from low situation of the water, recourse must be had to pumping or carrying. Where, however, there is no stream or other convenient way of obtaining water, a well must be sunk; and to do this in some parts of the country is no easy matter. A little expense, however, must not be thought of if a good and productive garden is the object in view.

After the well has been sunk, a pump will be needed to throw the water from the well into a tank placed some few feet above the level of the highest part of the ground. If a main pipe be then laid from this tank down the centre of the garden, branch pipes or wooden troughs may be laid from it to conduct the water into tanks distributed about the garden; or, better still, means may be provided for watering with a hose. This is the best and easiest way of watering, and, in some cases, even better than irrigation, as in the latter case all the crops have to be watered whether water is necessary or not, whereas, by the former method, any part can be watered separately, and the plants may be sprinkled overhead, an operation that is in many cases more beneficial to vegetation than root watering. Whenever water is given to any kind of crop, it should always be of a temperature, if possible, within a few degrees of that of the soil to which it is to be applied.

### What Birds Eat.

There was a paper read by John W. Robinson, before the Illinois Horticultural Society, on birds and what they eat. It is as interesting as anything we could write on the subject.

The red-tailed buzzard feeds upon squirrels, rats and mice, and, therefore, is the farmer's friend. The sparrow hawk occasionally takes a barnyard fowl, but feeds principally upon mice and moles. The king bird eats gad-flies, bot-flies and various insects, and sometimes fruit, but is not destructive to fruit to any degree. The great crested fly-catcher and pewee are fast friends of the orchardist, and live on insects solely. The bobolink eats the seeds of weeds, insects and, at the South, rice. Sportsmen eagerly kill it for the delicacy of its flesh.

The red-winged blackbird in the spring lives