



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The Wisconsin horticulturist. Vol. VI, No. 6 August 1901

Wisconsin State Horticultural Society
[s.l.]: [s.n.], August 1901

<https://digital.library.wisc.edu/1711.dl/LK2CZCWR3LLUK8T>

Based on date of publication, this material is presumed to be in the public domain.

For information on re-use, see
<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.



REPRODUCED FROM NATURE BY VREDENBURG & CO., ROCHESTER, N. Y.

WISCONSIN WEEPING WILLOW.

This beautiful tree resembles the Babylonica, but is more hardy and hence better adapted for planting at the North and North-west. There is no tree more generally admired, more easily grown, or of more rapid growth, and should be more extensively planted.

The Wisconsin Horticulturist.

VOL. VI.

AUGUST.

NO. 6

OFFICERS OF THE STATE HORTICULTURAL SOCIETY FOR 1901.

President, Dr. T. E. Loope, Eureka.

Vice-president, F. C. Edwards, Fort Atkinson.

Secretary, John L. Herbst, Sparta.

Treasurer, L. G. Kellogg, Ripon.

Corresponding Secretary, Samuel H. Marshall, Madison.



A BULB BED.

When we set up housekeeping we did as the birds do—built our nest among the trees. About our little home there still stands a bit of the primeval forest. In this woodland “Bre’r Rabbit” and his family dwell and thrive, with the arm of the law thrown protectingly about them.

“Bre’r Rabbit” is very fond of tulips and hyacinths, crocuses and scillas. Their leaves are his favorite table delicacy in the early spring. Later he eats lettuce and the blossoms of Lima beans.

Owing to this aesthetic taste of the rabbit our bulb bed seldom produces flowers, but we hope you are more favorably situated and can have the beautiful blossoms which

brighten the early days of springtime. If you cannot have a large bed, plant a little one, at least a few tulips and a group of crocuses and scillas.

We bring this subject to your attention now, because the bed should be prepared and the bulbs planted next month, "the earlier the better."

For tulips the soil should be well enriched. Plant the bulbs three inches deep and from four to six inches apart. Perhaps the Early Single Tulip is the best variety for the beginner.

The crocus bulbs should be set about two inches deep and three inches apart, if in a bed, and the bed should be covered, before the ground freezes hard, with leaves or other litter.

Scilla Siberica has small, star-like flowers of a deep blue color. Plant the bulbs about two inches deep and an inch apart, arranging them in clumps or masses instead of in rows.

Chionodoxa Lucillae, or "Glory of the Snow," is similar to the Scilla, but prettier, although perhaps not quite as hardy. It has small sprays of star-shaped flowers, blue with a white center. Requires the same soil and treatment as the scilla.

The Snow-drop with its drooping bell-shaped flowers, blossoms earliest of all. Its little bulbs should be planted in clumps like the scilla, the bulbs being placed an inch apart and two or three inches below the surface of the ground.

MARY CLARK JOHNSON.



THE HYACINTH.

"The hyacinth is a native of the Levant and was first introduced into England in the year 1596," writes J. Polman Mooy of Haarlem, Holland, in a paper read before the London Horticultural Club. Four varieties were described

at the close of the sixteenth century, single and double blue, purple and violet. In 1629 John Parkinson in a book on gardening mentioned eight varieties of hyacinth. From these eight kinds more than four thousand varieties have been produced, although only about two hundred varieties are on the market now.

The late James Vick is our authority for the following directions for growing hyacinths:

IN THE OPEN GROUND.—In planting hyacinths in the open bed or border have it rich and dug deep. A plenty of old stable manure dug in will show its effect by strong growth and bright colors in spring. Planting can be done any time in the fall while the ground is open, though the earlier the better. Set the bulbs from six to eight inches apart and deep enough to allow a covering of soil four inches thick over the top of the bulbs. If the soil of the bed is very heavy, it is well to have some light sandy soil, even clear sand, to place below for the bulbs to stand on and to cover them with, so that the roots may have a chance to start out freely, and the leaves to push without restraint. In all northern regions a covering of litter, leaves or evergreen boughs should be placed on the bed before steady freezing weather sets in; this will keep the soil unfrozen, so that the roots will have a chance to grow all winter, thus preparing the bulbs for prompt nourishment as soon as the leaves put forth in spring.

In bedding Hyacinths they are often set in lines or figures of contrasting colors, and in order to produce the best results some care is necessary to procure those that grow to the same height, or nearly so, and that bloom at the same season. A good way is to plant masses of contrasting colors.

IN POTS FOR WINTER BLOOMING.—A five-inch pot is the right size for one bulb—sometimes larger pots are used

and three to five bulbs set in, one at the center and the others about the edge. A bit or two of broken crock at the bottom of the pot for drainage, and then the soil can be filled in within an inch and a half of the top, and the bulb set on and pressed down into the soil and then a little more soil filled in until it comes to the neck of the bulb, but not covering it, and leaving at least a space of half an inch at the top, so that water can be supplied freely when the plant is in full growth. After potting water should be given through a fine rose so as to settle altogether and not disturb the soil, and the pot is then ready to be placed away in a cool dark place for a few weeks or a couple of months; a cellar is a good place. In such a position the bulb will send out roots, filling all the soil with them. This is necessary before a growth of leaves takes place, as the leaves and the flower-stem develop together, and if the bulb is placed in a warm and light place a stunted growth of the flower-stem and leaves will quickly take place, but not having roots to support them will soon cease to grow, and will thus remain a dwarf, imperfect and worthless specimen. While the pots are in the dark, examine them from time to time and supply with a little water, if the soil should become very dry. But much water is not needed, only enough to maintain a moderate moisture. When the soil has become filled with the clean white roots that the bulbs will make, and which can be seen by turning the ball out of the pot, the pots can be removed to the light and a little higher temperature, as has already been mentioned. To avoid the necessity of watering after potting and while in the root-forming stage, it is a good plan to cover the pots entirely over with soil or with moist coal ashes or with leaves.

IN HYACINTH GLASSES.—The water should just reach the base of the bulb, and, as before, the bulbs should then be set in a cool dark place until they have sent their roots

to the bottom of the vase. A few bits of charcoal put in the water of the vases at the time they are set away will have the tendency to keep the water pure. If the water should become impure or discolored it can be turned out and a fresh supply given.

THE ROMAN HYACINTH.—If early blooming is desired, the Roman Hyacinth must be employed, as it can, with proper treatment, be brought into flower by Christmas. The course to be pursued with it is to pot it and treat it in the manner already described, though it will pass through its course of rooting growth in a shorter time. The bulbs of the Roman Hyacinth are smaller than those of the other varieties, and three or four of them can be put in a six-inch pot.

NAME THE FARM—A NEW LAW THAT WILL INTEREST THE FARMERS.

The following law was passed by the last Wisconsin legislature which provides a way for naming the farms in any township where the majority of voters favor it:

Section 1. The town clerk upon a petition signed by ten per cent of the qualified electors of his town, filed with him at least thirty days before the annual town meeting, shall include in his notice of such meeting the following question to be voted on: "Shall the farms in this town be named?" The vote shall be taken by the ballot. Those favoring the proposition shall vote "Yes" and those opposing "No."

Section 2. If the proposition carries, the town board shall, within thirty days, adopt a by-law providing for the selection of names, by the owners of farms, the registry thereof with the clerk, the size, style of and method of placing proper signs upon farms and for the naming of and

placing signs upon farms which the owners thereof neglect to name.

Section 3. Within thirty days after receiving written notice from the town clerk to comply with the provisions of said by-law, any owner or occupant of a farm failing so to do shall be liable to a penalty of ten dollars and costs to be recovered in all action brought in the name of the town. The word farm, as used herein, shall be construed to mean such lands as are actually occupied for agricultural purposes by the owner or his tenant.

WHAT SHALL WE NAME THE FARM?

The Rural New-Yorker answers this question as follows: We would hardly like to suggest a name for a farm without knowing all about it. Such a name ought to suggest some striking feature about the place, or some sentiment or ambition connected with it. Some farms are named after individuals—the name may be a combination of different personal names—or it may indicate some special feature of the place, as “Pine Tree,” “Cherry Lawn,” “Lakeside,” “Hill Top,” etc. We think that every farm should have a name, but the farmer or his family should select the name themselves. The more true sentiment and poetry you can get into such a name the better.

MACARONI WHEAT.

Most farmers will be surprised to learn that in spite of our enormous exports of wheat, we are compelled to import hundreds of thousands of bushels of it for use in making macaroni. For this wheat we pay a higher price than we get for our wheat abroad. We mix it with our own wheat, thus producing an inferior quality of macaroni and also import 15,000,000 pounds of that useful food. Professor

M. A. Carleton, the wheat expert of the Department of Agriculture, says that macaroni wheat can be grown with great profit in many of the Western States, especially Texas and other Southwestern States. It is one of the best drought-resisting wheats known, and can be grown in localities where the rainfall does not exceed ten inches annually. For this reason it should prove especially valuable in Texas. Experiments already made there have been very encouraging. With the object of encouraging the growth of the wheat, the Department of Agriculture has instructed its agricultural explorer, Prof. D. G. Fairchild, who is now traveling in Algeria, to procure several hundred bushels of the Algerian macaroni wheat, which will be shipped to the Department and distributed in the arid and semi-arid regions of the West.

NUTRITIVE VALUE OF FOODS.

Recent experiments of the Department of Agriculture show that fruits in general contain remarkably little stuff that is convertible, when eaten, into muscle and blood. Bananas and grapes have about two per cent, while apples, cherries, strawberries, blackberries, cranberries, lemons and oranges are able to lay claim to only 1 per cent—this, too, when skins and seeds are put aside. On this account, such articles of diet are obviously ill adapted to sustain human life for any length of time, though they possess great medicinal value and contribute much to health.

Fruits are, however, relatively rich in sugar and starch, and hence are useful as fuel to keep the body machine going. Bananas have 27 per cent of these materials, grapes 21 per cent, apples 16 per cent, cherries and cranberries 11 per cent, oranges 9 per cent, lemons 8 per cent, and strawberries 7 per cent. In this case, as before, only the edible portions are considered. Blackberries and

grapes have 2 per cent of fat, and the other fruits mentioned contain 1 per cent. Watermelon pulp is 92 per cent water.

Among vegetables Lima beans have the highest food value, containing 32 per cent of nutrients. Sweet potatoes come next, with 29 per cent, green peas next with 22 per cent, white potatoes next with 21 per cent and string beans next with 13 per cent. Green sweet corn has 19 per cent of nutrients, beets 12 per cent, turnips 11 per cent, cabbage, cauliflower and spinach 8 per cent, eggplant and lettuce 7 per cent, tomatoes and asparagus 6 per cent and cucumbers 4 per cent. Dry beans or rice are about the most economical of foods one can buy, containing as they do 88 per cent of solid nutriment.

Fish has very high food value, in fact, is very nearly as nutritious as chicken or turkey. A pound of eggs, on the other hand, yields only half as much nourishment as a pound of lean beef, notwithstanding a well-known popular theory.—Farmers' Review.

THE BOY WANTED IN BUSINESS.

"What kind of a boy does a business man want?" was asked of a merchant.

He replied: "Well, I will tell you. In the first place he wants a boy who don't know much. Business men generally like to run their own business, and prefer some one who will listen to their way rather than teach them a new kind. Second, a prompt boy, one who understands seven o'clock is not ten minutes past. Third, an industrious boy who is not afraid to put in extra work in case of need. Fourth, an honest boy—honest in service as well as matters in dollars and cents. And fifth, a good-natured boy, who will keep his temper, even if his employer does lose his now and then."

SOME BLUNDERS WHICH ORCHARDISTS MAKE.

We have recently read an interesting article in the Independent, entitled "Shall we go on planting orchards?" The article was written by the noted horticulturist, E. P. Powell. Mr. Powell says it seems to be a general conviction that of all trees or plants the one that can best shift for itself is the apple tree. I believe it never enters the head of the average grower that an apple tree needs to eat at all. Certainly he never feeds it unless by accident. Pear trees and cherries and currant bushes get a little general care; and strawberries are cultivated as a speculative crop to get rich on; but the grand apple must take care of itself, "Root hog, or die." The saddest sight in a drive anywhere about is the broken-down, neglected, wretched condition of the noblest tree ever given to humanity.

The trees are rarely mulched and after setting are not trimmed or fed. Go where you will the suckers are devitalizing the trees. The abuse is so bad as to be a source of pain to a tree lover. It does not seem to enter the head of the farmer that the shoots all over the trunk and limbs are taking the life out of the tree. No limb can long endure the sapping of its vitality. When called to produce fruit it breaks off and soon the whole tree is ruined. An apple tree should be an ideal of beauty. It will be that if properly treated. No tree is handsomer, stouter, more vigorous. Varieties that lack in vigor should not be planted. Cut out all suckers as fast as they appear. Go over the trees in summer, and again in November, or before they leaf out in spring. A farmer with an orchard should carry a pruning knife. Mulch every tree with coal ashes or similar material once a year, forking out the weeds and grass that start. Feed the ground about with liberal supplies of manure and salt and lime. Stake all trees until they are well established. Head moderately low, and use your brains in shaping the head as it grows. No two varieties

will naturally take just the same form. Neglect this care of apple trees and you may as well dig them out and burn them.

Another blunder is made in allowing the fruit to be nearly all made defective by worms. Science has progressed so far that we can effectually hold our own with nearly every moth or beetle or worm known. I can master the enemies of the currant, plum, cherry, pear and apple. The remedy for codlin moth is to spray with arsenical mixtures. I have found one application made with a small force pump is quite enough. I use one pound of Paris green to 200 gallons of water and have no more wormy apples. Still it is wise to make two applications; the first just as the petals drop. Different sorts blossoming at different times require to be attended to separately. I have but small hopes that farmers will seriously become orchardists until they fight the foes of their crops and conquer. Much of the lack of zeal in apple growing, as in the growing of quinces, pears and plums, is owing to the fact that the majority of farmers have been whipped by the bugs and have lost hope. Let it be understood that it is far easier to overcome the enemies of the apple than those of the potato and cabbage. It is easier to catch and kill the plum curculio than to catch the moles in our root gardens.

A vital error is made in the selection of varieties. There are to be found many whole orchards of one sort, or of two or three. This is folly for two reasons—a failure of a single sort is a loss of your whole crop; and a heavy yield is liable to bring you into competition with a glutted market. This is invariably so with summer and fall apples. The Red Astrachan never brings a fairly remunerative price; the market always overflows if there is any fruit at all. Our early apples meet a very moderate demand, and are

perishable. Winter fruit can be stored; autumn sorts cannot. Beyond home use there are very few farmers who can use much early fruit to advantage; it is not even available for cider as a rule. But we have not so very large a list of paying sorts of apples.

If you live in the apple belt of the Northern States select for winter apples not more than ten or twelve sorts even for a large market orchard. It is not profitable for a long series of years to grow a poor quality apple like the Ben Davis. The demand is always for the best sorts, and a poor apple soon gets found out. Half a dozen varieties cover all that are needed for summer and fall, both for table and for market.

ORCHARD NOTES.

In a large proportion of Wisconsin orchards there are but few apples this year and those few are for the most part worm-infested and gouger-stung. If these wormy apples are picked up clean and fed to the hogs or burned it will greatly lessen the number of insect pests next year.

A good winter apple to follow up the fall varieties is much needed. An apple of the flavor and keeping qualities of the Rhode Island Greening and the vigor and productiveness of the Duchess would be of immeasurable value for this section.

The Walbridge is conceded to be the best keeper we have, but it is of poor quality and an unreliable bearer.

COVER CROPS.—Observations from the severe winter of '98-99 have taught us the value of winter protection for the roots of our fruit trees. In localities where the trees were protected by snow the trees fared fully 50 per cent better than where unprotected. But snows are uncertain and cannot be depended upon, hence the necessity of some artificial

winter cover for the orchard. Straw, manure and even weeds are of value for this purpose. Perhaps the most promising material, however, for this work is the hairy vetch, *Vicia villosa*. When sown in early autumn after cultivation has ceased, it covers the ground with a thick, heavy carpet and remains green the greater part of the winter. In addition to this it is valuable as a nitrogen gatherer, being a member of the pea family.

Chas. Green says cows are the best friends of nurserymen in one sense. That is to say, there are hundreds of thousands of fruit trees destroyed in this country every year by cows, and those destroyed make it necessary for other trees to be purchased. I have never seen a cow loose in an orchard or garden, that it did not at once dive at the first tree, almost wrecking it in its effort to scratch its head.

If ants are troublesome in the orchard pour kerosene into their nests from an oil can.

A peculiar sight seen on many farms in Allegheny Co., N. Y., this spring was that of large apple trees lying flat on the ground, yet loaded down with blossoms. These trees—and there were hundreds of them—were uprooted by the severe ice-storm last winter.

Few people have any idea of the enormous value of the apple crop of the United States. According to the Independent the American apple crop for 1900 aggregated 215,000,000 barrels, being worth at an average price of \$2 per barrel the enormous aggregate of \$430,000,000. Compare these figures with the following: Corn crop of 1899, \$629,210,110; hay crop of 1899, \$411,926,187; wheat crop of 1899, \$319,545,259; cotton crop of 1898, \$305,467,041; oats crop of 1899, \$198,167,975.

So large a part of the apple crop is consumed where it is grown that the part marketed and included in the above valuation is probably much less than the actual value of the crop. No statistics can do justice to the yield, monetary value or dietetic worth of the American apple. As the strawberry is the best berry so the apple, in spite of the part it played in Adam's fall, is the best fruit known to man. It is the king of American fruits.

EXPERIENCE WITH GIRDLED TREES.

In an exchange we find this bit of experience from a man in Franklin, Michigan: Twelve years ago last June I girdled a tree for a friend, telling him it would either make it bear or kill it. He said he did not care which, for the tree was no good as it was. So I cut a complete circle about four inches below the limbs, taking out about three-eighths of an inch of bark. The tree bore the next year, and for the next succeeding nine years; since then I have not heard from it.

About the same time I took the bark all off a tree from the limbs down to the ground. A new bark formed in a few days, and the tree would have done well, but accidentally I threw some sand against one side of the body, and in trying to get it off injured the new bark, so it never healed over. The rest of the tree healed over and lived until broken off by the wind. We have always girdled the trees in June, and have practiced it ever since with more or less good results, but never with any bad luck except stopping the growth of wood, which is our object. Last year I girdled 50 crab apples, which are planted by the roadside eight feet outside of the fence, which is a grape arbor. This year we have 250 bushels of choice apples from those trees girdled. This year I have girdled 10 acres of orchard of 400 trees, all of which are looking well.

BUSINESS AT THE SUBURBAN NURSERY.

I never realized until lately what a nuisance it would be to a certain class of nurserymen to fumigate every small order. I recently passed a few days at a nursery near a large town, where there are many fine residences. The people are interested in fruit and ornamental trees. They do not order by mail, but wait until the day the trees are to be set out, and drive right to the nursery. In many cases the trees are dug while they wait, and they take them home in their carriages. They usually wait until the eleventh hour. Their orders are small, and they expect to be served about as quickly as they would have a prescription put up at the drug store. Now how can a nurseryman fumigate these little orders? The trees might perhaps be dipped in a solution of whale oil soap, but that would make them smell so that no one would come the second time. I can see how large orders or small ones sent by freight or express can be easily lumped together and fumigated, and I realize that it is wise for a buyer to demand fumigated trees. How can these small delivered orders be fumigated? I wish some nurseryman with a trade of this sort would tell us how he manages.

Another thing worth considering is the great detail in the work of a nurseryman who supplies this suburban trade. He must be quick-witted and ready at a moment's notice to tell people what varieties they need and how to take care of the trees. A person ordering by mail may write a 10-page letter about a single tree, but you can read it at your leisure if at all. A talkative buyer with no value to his time, who meets you face to face, cannot be dodged. People drive in without any warning, and want a small order filled at once. You may be right in the midst of a job that requires the most careful selection and sorting. You must stop or send a man to a dozen different parts of the nursery

after this variety or that of apple, pear, plum, peach, asparagus or shrubs. The wonder is that a man keeps his head at all under such circumstances, for there are hundreds of chances to mix up varieties. Surely it requires men with patience and grown-up wits to handle the nursery trade.—
Rural New-Yorker.

BORDEAUX MIXTURE FOR POTATOES.

A New York man who grows potatoes largely says: "We spray our potatoes two to four times during the growing season each year with Bordeaux Mixture, and I am amply satisfied with results. They grow better by its use when there is no blight (rot blight), and when there is rot or blight our potatoes are sound and healthy. Of course we spray them well; do not try to put on Bordeaux Mixture with an atomizer, which reminds me of eating broth with a fork."

This man gives in the Rural New-Yorker his method of preparing and applying the mixture: "It is somewhat amusing to a practical man to learn how some of our scientific friends make Bordeaux Mixture and apply it. I would venture to say if you should put 50 or 100 pounds of sulphate of copper in a cask of cold water you would find a good share of it in the crystal form at the end of a month. I should feel sorry indeed for the man who tries to dissolve his vitriol in cold water, while with boiling water it is a very easy matter to dissolve 120 pounds of vitriol and have it in the supply cask in one hour. This is the usual quantity of stock solution for 18 to 20 acres of potatoes.

"We usually keep two barrels of lime on hand, slake $1\frac{1}{2}$ bushels in each barrel, fresh hard stone lime, and stir well while slaking, so that it will be fine; poor slaked lime makes lots of trouble in spraying. Kept in the putty state it will not lose its strength during the season. Keep a stock on

hand during the spraying season; it is good for the land if you have some left, and bear in mind to strain through coarse cloth all that goes into your sprayer. Of course you have lots of water. A good windmill and 40-barrel steel tank for storage, also a good tank for your wagon to take to the potato field, will greatly facilitate matters. We use the yellow prussiate of potash test, but always use an excess of lime, as lime gives durability to the application, and does not wash off so easily.

“Last, but not least, have the best power sprayer that is made, and learn to operate it and keep it in repair, and you will have no trouble to spray an acre of potatoes in 15 minutes, when the apparatus is filled up and ready to start. Success in this, as in other difficult operations, depends upon preparation, the know-how, and attention to the little things.”

TORNADOES—WORTH REMEMBERING.

From report of the Weather Bureau at Washington we take the following:

Tornadoes move east or northeast.

The line of safety is toward the northwest. If the observer faces the storm, let him turn to the right and make the best time he can. The strength of the tornado is near its southern edge. Time is usually afforded for escape if people will keep cool and make no false steps.

If they run to the east they will soon be overtaken. If they run into the woods they increase their danger. If within a house or cellar, they should avoid the easterly side.

In a wooden house the cellar is the safest place; in a house of brick or stone the cellar is the most dangerous. The best preparation is to make an excavation in the west side of the cellar, supported by heavy timbers and well-constructed masonry.

SUGGESTIONS FOR PLANTING AND CARE OF AN APPLE ORCHARD.

Location.—My choice of location for an orchard is a northerly slope. At any rate I would avoid a decided southerly slope. The latter is just the spot for an early spring garden where vegetables are to be started and urged into earliest possible growth, but fruit buds need the reverse regime—to be held in check till all danger from late spring frosts is past.

In soil, I prefer a rather light, friable loam with a gravelly subsoil, such as hardly ever needs underdraining for most farming purposes. Avoid a cold, heavy clay. If I had no other than the latter, I would plant at least a small orchard, but would thoroughly underdrain or else work the land into slight ridges on which to set the trees, and to get the best possible surface drainage. Apple trees seem to abhor clammy, wet feet. Soil should be neither too poor nor too rich. If it is at a good corn or potato-growing standard it is strong enough to push an apple tree if properly tilled. Clover sod, or land that has been one season in some cultivated crop, I think is best to set an apple tree in.

I would not set trees over three years old, that is a two-year-old graft on a three-year-old stock. I prefer seedling stocks to root stocks every time.

I have often heard advocated the setting of peaches, plums, cherries and bush fruits in between the apple trees for early fruit returns, rooting them out as soon as they interfere with the proper growth of the apple trees. This sounds well, but, so far as I have observed it, it is not so fine in actual results. If an orchardist is not scant of room, has any live stock to feed or a fair market for potatoes, beans or coarser forms of garden truck, these crops will afford more real profit while the apple orchard is growing than the extra fruit from such a combination orchard, and the apple trees will grow better.

Fertilizing.—In fertilizing apple trees, use stable manure or any ammoniate sparingly, although the old and worn New England soil will bear more ammonia than the stronger and newer lands farther west. After the trees have come into bearing, use ammoniates still less. Use plenty of phosphoric acid and potash, especially potash. Muriate seems to furnish potash in cheapest form, but of course hardwood ashes are more acceptable to the trees, if the ashes are pure. Potash seems to help form sound wood and especially helps to perfect native fruit flavor.

I would never, never, NEVER let a tight sod form upon an orchard of mine, no matter how old. Give at least one plowing each season, preferably in the spring, and follow with clean culture or some leguminous crop, such as crimson clover or peas, to fall and rot upon the ground.

Spraying.—Let us all pray and spray. Let us not fail to pray the good Lord to aid us with the early and the latter rains and all that is needed to secure the luscious fruit we are striving for; but let us also not fail to spray. The Lord seems to favor the up-to-date worker in any line. If commenced the first season after setting, I think two sprayings of Bordeaux mixture and arsenites are enough each season while trees are young. In some seasons, after trees are in bearing, a third spraying may be best, but I doubt its necessity every season, because some seasons are drier and more free from fogs than others, and do not so much favor the development of fungi. Give the first spraying when the leaves are just coming out, the second two to four weeks later, according to circumstances, and the third when needed still later. When commenced thus with young trees and kept up, I doubt the necessity of ever spraying with clear copper sulphate solution in early April, when the buds are dormant.

Pruning.—The pruning of the apple is simple, and eas-

ily done when commenced promptly the first season, preferably in the fall when all growth has ceased. Aim to avoid the formation of sharp crotches as limbs join the main body for such split down easily by the wind when loaded with fruit. Also avoid limbs' crossing. Arrange the limbs for free admittance of sunshine. The leaves and fruit need it.

HOW TO PLANT AN APPLE TREE.

Here plant the apple tree,

Dig deep its future bed and broad;
Spread wide its roots, not deeper than it grew,
Bring garden loam, enriched the year before;
Thy thick-soled boot should every crevice fill,
And then with mallet made of wood, sound to the core,
Press down the soil, until the tree defies the strength of
youth to move it.

Its top reduce one-half, or more;

Let no excuse prevent its early setting,
See that no insects suck rich juices from its silky bark,
Made crimson by their getting.

Protect its trunk from sunshine's most intensive rays,
And place a guard, lest mice, so skillful
To destroy, when hidden by the snow,
May then elude thy sight.

Thus by thy labor well performed,

Thy sleep is sweet,
Thy conscience clear.

Thy basket will in time a harvest reap;
Thy store with plenty filled.

J. W. ADAMS, Springfield, Mass.

Some men grow gray waiting to be given a chance.
Other men take it.

FALL PLANTING.

Prof. W. J. Green, of the Ohio Experiment Station, has this to say on the subject of fall planting:

The broad assertion is often made, sometimes by interested parties, that the fall is the proper time to plant trees and plants of all sorts. This is not true, and some of the exceptions are very important.

Climate, soil, kind of trees and season, all need to be taken into account, in determining when to plant trees. In a severe climate it is not safe to plant tender trees in the fall. It is not safe to plant small fruit plants in heavy clay soil in the fall, unless unusual precautions are taken to prevent heaving out by the frost. Then there are seasons when the ground is so dry until very late in the fall that planting becomes an arduous task, costing two or three times as much as it would in the spring, nor can the work be as well done as when there is more moisture in the soil.

Some experiences of my own in losing plants by heaving out during the winter; by the soil forming a crust so that the young sprouts of raspberry plants could not get through, and in attempting to set trees when the soil was so dry and hard that it had to be dug with a pick, make me feel like giving a word of caution to those who contemplate fall planting. My first experience was in setting red raspberry plants in the fall. The field was not wet enough to make drainage necessary, as shown by the fact that a fine plantation of red raspberries was established there without tilling. The plants were set in the fall, and the winter was not severe, and yet a large part of them were on top of the ground in the spring. They were replaced in the spring and a good stand secured. The next experience was with black raspberries on a clay soil. Twenty-five dollars' worth of plants were lost because a crust was formed on the surface of the soil, through which the tender sprouts could not push their way. Several attempts at digging and planting

trees in the fall have been only partially successful because of dry weather. These experiences are not given to show the advisability of fall planting, but rather to point out some facts not usually stated by those who recommend fall planting indiscriminately.

I might mention some unprofitable experiences in spring planting also due to uncontrollable conditions, for failures as well as successes are met with at both seasons. One must intelligently study circumstances and conditions and master underlying principles to be sure of success in either fall or spring planting.

PRECAUTIONS TO BE TAKEN.—Let us see now what should be done to make fall planting reasonably sure of success. Careful preparation of soil is less important in fall than in spring planting. About all that need be done, in most cases, is to plow the ground and leave it without harrowing. It is more necessary to look after drainage if planting is done in the fall than if done in the spring, and surface drainage particularly. Be careful to see that trees or plants are not set in furrows or slight depressions where water may stand for days or weeks at a time. Open ditches must be cut to let the water off in case there is doubt as to its running away expeditiously.

It sometimes happens that a hardpan exists and this is broken up and the uncongenial soil replaced with a kind which is considered more favorable to tree growth. This is well enough if an outlet is provided for water which may otherwise collect in the bottom of the hole and remain there unseen all winter and late in the spring. It is better to set a tree on top of a mound than in a hole that will hold water.

Guard against mice gnawing the bark of newly planted trees, and prevent the wind swaying them about by throwing a mound of earth around each tree. It is as well not to prune very severely at the time of planting in the fall, but

just before spring opens complete the work. A limb that is cut back in the fall loses more water by evaporation than if left entire. Whether this is a matter of sufficient practical importance to warrant some extra work in delaying the pruning I am not able to say, but I would prefer to delay the pruning as above advised, for it is certain that a fresh cut will heal better than an old one.



OUR ROBINS.

Abbie Nisbet Wolcott.

They were ours by reason of propinquity, not from captivity. For are we not rooted and grounded in the faith that all birds should be free and happy? and captives are not happy. When one wrote me "The oriole is back and I wish you were here to see him; he is so handsome, I wish I had him in a cage," there was not a particle of sympathy in my heart for the wish. Cage an oriole, that streak of sunshine! As well cage a sunbeam!

But our robins, as free as air, had begun housekeeping sometime before we secured rooms near the maple tree which held the tiny home, and lively, interesting neighbors they proved. They seemed to be quite a young couple, not experts in nest building, for the home had rather a ragged appearance. He was a slick, dapper, rather dudish fellow; while she was a matronly looking madam, with a rough streak on the broad red breast where she had plucked feathers to line the nest. Mr. Robin quite surprised us one morning by taking Mrs. Robin's place on the nest while she went away for a little outing. But he was very uneasy, standing up and picking at the nest. One could see that he did not enjoy housekeeping any better than men do when the wives take an outing. As soon as he had got a glimpse of her returning he was away in a flash. Several times during the day he would come to her relief but was always

restless on the nest. Occasionally he would bring her a plump worm with the air of a man treating his wife to an ice cream soda.

But faithfully Mrs. Robin attended to her duties through wet and dry, hot and cold, until one day there seemed something unusual going on in the small home; the birds would stand on the edge of the nest, peering in and picking away at the contents, then one of them would bring a worm and put in the nest and they would share it in a picnic sort of fashion. In a day or two it was quite evident that there were nestlings in the home, requiring food and care.

Well, those two robins were kept busy from early morn till late in the evening filling three gaping mouths. Earth worms seemed to be the favorite diet, with an occasional lake fly or green worm by way of change. Robin shirked at times and loafed about the lawn with his hands in his pockets, but the madam drudged incessantly. But then Rob kept a sharp watch for squirrels and other intruders and would fly at them spitefully whenever they approached the precious nest. For two weeks there was not five minutes in the day that some morsel was not brought to fill a hungry mouth.

Then one afternoon there was a commotion on the lawn. Both birds were excitedly flying and calling so that our attention was attracted. On going out the trouble was apparent. There, within two feet of a large gray cat, one of the young robins was innocently sitting, while the old birds were trying their best to explain what a dreadful monster was waiting to devour it. The cat was driven away and while I was attempting to place the young bird on a fence post both birds flew at me, frantic with rage and fear. Another and then another of the young left the nest. A redheaded woodpecker flew down to see what all the commotion was about and a rosebreasted grosbeak, who seems

to have a nest near, came to see what all the row was. Spitefully the robins chased them away, seeming to say, "Go away, all of you, and mind your own business, we can take care of our own birds." The grosbeak lit on the stump of an old apple tree and calmly looked on while the woodpecker in a nearby map ^{sc} called "Kitty, kitty, kitty," in shrill tones, as though ^w warning the young ones. Those robins scolded and ^{plead} ^{coaxed} with worms and tried by example to induce the ^{little} ones to take refuge in an old apple tree on the lawn. ^{One} got as near to it as the clothes reel and that was all they accomplished. At eight o'clock in the evening I could hear them still scolding. The next morning there were but two of the young to be seen, probably the gray cat supped on young robin that night.

They can fly now and they besiege the old ones for worms every time one comes in sight. One parent seemed quite provoked at their teasing one day and pecked the young ones spitefully. For all his labors Robin assists at an early concert every morning and gives a solo quite often, but madam looks worn and is quite silent.

NOTES FROM THE U. S. DEPARTMENT OF AGRICULTURE.

In answer to a series of questions submitted by Secretary Wilson to the Controller of the Treasury, as to the former's powers under the clause of the Agricultural appropriation bill, which authorizes the Department to investigate, in co-operation with the other divisions of the department and experiment stations of the several States, the market conditions affecting the fruit trade of the United States and foreign countries, and the methods of harvesting, packing, storing and shipping fruit and vegetables; and for experimental shipment of fruits to foreign countries, for the purpose of increasing the exportation of American fruits,

and for all necessary expenses connected with the practical work of the same. The Secretary has received a reply which says that the Department may adopt either or both of two plans submitted for approval.

Secretary Wilson prefers the first of these plans and will now proceed to act under it, his object being, of course, to create a market for our fruits abroad. The plan proposes to enter into co-operative arrangements with dealers and exporters whereby the department shall guarantee a definite minimum net return per package on fruit picked, packed, shipped and sold under directions from the pomologist of this department through the ordinary channels of trade. Under such agreement the exporter would receive the net proceeds of sales; if this net return should be less than the guaranteed amount the difference between the net proceeds actually realized and the guaranteed return would be paid the exporter out of the moneys appropriated for Pomological investigations.

The Agricultural Department is now making preparations for a series of experiments next spring to test the growing in this country of fruits and vegetables which for centuries have been used by the Chinese. In many cases the success of a plant brought from across the sea will depend upon some form of animal growth which thrives in the earth about its roots and gives forth nitrogen, which is one of the needs of the plant to secure its full development or on some insect that fertilizes its flowers. When that is the case, as great care is taken to import the parasite as is taken to secure the seed or the plant itself.

“There is just one thing needed to make my business a success,” said the painless dentist.

“What is that?” asked the interested listener.

“A shoutless patient.”—Baltimore American.

FOR THE HOUSEHOLD.

BAKED SWEET CORN.

Butter a baking-dish. Split the kernels of sweet corn through the middle lengthwise of the ear and scrape the pulp into the baking-dish, leaving the hulls on the ear. Season the pulp with salt and pepper, adding a small spoonful of sugar in case the corn is deficient in sweetness. Pour over it enough rich milk to barely cover it, about one-third as much milk as corn, add a tablespoonful of butter. Bake in a hot oven about half an hour, or until it begins to rise in the center of the dish.

BAKED QUINCES.

Rub the quinces with a cloth until perfectly smooth, remove the cores, fill the centers with sugar, place them in a granite-ware baking-dish, pour a very little water about them and bake slowly until tender. Serve cold with cream and sugar. This is a delicious dessert.

BAKED APPLES FOR DESSERT.

Take the Fameuse or some other mildly acid apple. Wipe the apples clean, remove the cores, fill the centers with sugar, set the apples into an earthen or granite-ware baking-plate (not tin or iron), pour a very little water in the bottom of the plate—not as much as for sweet apples—bake until tender, which will take from half to three-quarters of an hour. Serve hot with cream and sugar.

SUGGESTIONS WORTH TRYING.

Ink stains may be removed from linen by putting melted tallow on the mark and then washing the article. The ink and the grease will come out together.

Yellow stains left by machine oil on white material may be removed by rubbing the spot with a cloth wet with ammonia, before washing with soap.

Soiled photographs may be cleansed by sponging with clear cold water. The cardboard mounts should be cleaned with dry bread.

A raw potato will remove mud marks from black clothes. It should be cut in half and rubbed on the marks.

STATE CROP REPORT, AUGUST 1, 1901.

Hon. J. M. True, Sec'y of the State Board of Agriculture, says:

The month of July furnishes an unusual and withal interesting chapter in the history of Wisconsin agriculture.

The unusual high temperature, continually maintained, for a long period, when accompanied by sufficient moisture, advanced crops rapidly, and generally without great injury; but in those parts of the state where little rain fell, earlier maturing crops were prematurely ripened, with considerable loss both in quantity and quality of product; while corn, late potatoes and tobacco were either blasted or held at a standstill for weeks.

While rains have relieved the condition of these crops, the extent of damage done is yet considerably a matter of conjecture, no one seeming to have before witnessed conditions identical with those now existing.

The severe drouth seems to have been mainly confined to the following counties: Columbia, Crawford, Dane, Dodge, Grant, Green, Iowa, Jefferson, Kenosha, La Fayette, Milwaukee, Racine, Richland, Rock, Sauk, Walworth and Waukesha and to give a better idea of the extent of threatened loss, I have considered these seventeen counties in a group with reference to the two important crops—corn and oats.

The percentage of a full crop of corn from this stricken district is, by correspondents, reported at 58. The average percentage of a full corn crop for the entire state is 70. The estimated percentage of potato crop is 78. Apple crop 20.

Special interest, from this time, will be taken in the development of the crops of corn, late potatoes and tobacco. The corn crop in southern Wisconsin is late, having been held in check by drouth. If, as is generally hoped, it may go on and develop ears, it will need a warm, favorable August and early September to mature its fraction of a crop. The same requirements apply to tobacco. The apple crop will be exceedingly light and quality poor.

A NOTE FROM THE PAN-AMERICAN EXPOSITION.

We hope to have a full account, in the September Horticulturist, of what Wisconsin is doing in the Horticulture Building. As yet the exhibit is in its formative state and there is not much about which to write.

Mr. A. A. Parsons of Eureka is in charge at present, so we can feel assured that our interests are in good hands. Mr. Parsons writes in a personal letter: "As you may know I am at the Pan-American trying to make a show of Wisconsin fruits. I am not satisfied with my efforts yet, but hope for something better soon. Can't you have a little sympathy for a poor fellow away here all alone and send something. If not fruit something in the decorative line. Suggestions and advice would be in order that would encourage me along my 'thorny path.'"

The Twenty-seventh Biennial Session of the American Pomological Society will be held in Buffalo, N. Y., Sept. 12 and 13, 1901. Headquarters at the Epworth Hotel near the Terminal Entrance to the Exposition grounds. The very attractive program includes such names as J. H. Hale, Prof. Bailey, Chas. Garfield and others equally noted. Persons desiring to exhibit promising varieties of new fruits should write at once to F. W. Taylor, Supt. of Horticulture, Pan-American Exposition, Buffalo, N. Y.

IN MEMORIAM.

DEATH OF MRS. GOFF.

Mrs. Antoinette Carr Goff, wife of Prof. E. S. Goff, of the College of Agriculture, State University, died July 18, at their home, 1113 University Avenue, and on the following Saturday was laid to rest in Forest Hill cemetery.

The following tribute is from the Wisconsin State Journal: Mrs. Goff's illness was due to tumor in the region of the liver. For two or three years she has been delicate, but by Thanksgiving last the seriousness of the case became obvious and since February the lady had been confined to the bed. Two sisters attended her, Miss Carr, having made her home with the family for some years, and Mrs. C. H. Sterling of Elmira, leaving her own home duties in March that she might be with Mrs. Goff. The sufferer realized that the end was coming and with calmness, stayed by Christian faith, planned for the future of their only child, Moulton Babcock Goff, a boy of 12, named after the father's distinguished associate in the faculty. Mrs. Goff was conscious until a few hours before her death. She was a devoted mother and a lady whose kindly, courteous ways endeared her to all. She was born in Elmira, where the marriage took place in 1880. Prof. and Mrs. Goff lived in Geneva for seven years and since April, 1889, have made Madison their home. To Prof. Goff, whose scientific attainments, practical co-operation and earnest character have endeared him to the agricultural interests of the state, and to the motherless boy, the sympathy of all goes out.

Died June 26, at his former home near Waupaca, Mr. Henry Burnham of Lind, Wis., from the accidental kick of a young horse. Mr. Burnham was 33 years of age, an honored and respected citizen. He was one of our most pro-

gressive and painstaking young farmers. Through careful management and diligence he had secured, at this young age, a competence worthy the efforts of a lifetime. He was very popular with the young people in his neighborhood and took great delight in pleasing children and aged people. He was a member of the Waupaca Horticultural Society and had served as its secretary and treasurer most efficiently. Our society mourns the loss of a valued member. We extend our condolence to the father and mother, sister and only brother, who sorely mourn his untimely death. Mr. Burnham was a Christian and took pleasure in Sabbath school and kindred work. His character was upright and exemplary.

A. D. BARNES.

EDITOR'S NOTES.

Both personally and in behalf of the State Horticultural Society we extend to Prof. Goff our deep sympathy in his bereavement.

Please notice the change in date of summer meeting. See next page.

The scarcity of early vegetables and their consequent high prices, is almost unprecedented. In Milwaukee tomatoes brought ten cents per pound last week and potatoes from \$1.50 to \$1.75 per bushel. In Baraboo potatoes are now selling at 40 cts. a peck and apples at \$1.50 per bushel, worms and "gougers" included.

Blackberries in this vicinity have sold readily for \$2.00 per 16-qt. case throughout the season; strawberries averaged \$1.50 per 16-qt. case.

The papers report a very large attendance at the recent meeting of the Cranberry Growers' Association. Judge J. A. Gaynor advocated establishing an experiment station for the culture of the blueberry.

Notice Mr. Dartt's advertisement of poem elsewhere.

**MEETING OF WISCONSIN STATE HORTICULTURAL SOCIETY
POSTPONED ONE WEEK.**

On advice of Prof. E. S. Goff it has been deemed expedient to change the dates of above meeting from August 19, 20 and 21, to one week later, making dates now fixed for the meeting, August 26, 27 and 28, 1901. Make your arrangements accordingly.

J. L. HERBST, Secretary.

There will be a meeting of the Executive Committee Monday evening, Aug. 26. The convention proper will open Aug. 27 at 9 A. M. in the Assembly Chamber. Entertainment will be furnished at the Capital House at reduced rates. Wednesday morning all attendants of the convention are invited to visit the University Farm; in the afternoon we are to be guests of S. H. Marshall at Maple Bluff Farm.

We understand that Mr. J. S. Stickney has been accruing experience along the line of spraying cauliflower.

THE
Wisconsin Horticulturist for 1901.
THIS PAPER
and the
WEEKLY WISCONSIN
For Only Fifty Cents.

We have perfected clubbing arrangements whereby we can now offer both the Wisconsin Horticulturist and the Weekly Wisconsin for the low price of 50 cts. a year. This is a very liberal offer and should be taken advantage of by a large number of our readers.

The Weekly Wisconsin is a family newspaper unexcelled in reputation. Particular attention is devoted to the local news of Wisconsin and the northwest. It's woman's page of matter every week is worth the cost of the paper.

Do not delay, but subscribe at once, and secure both papers for the very low price, to-wit: 50 cents. Address,
The Wisconsin Horticulturist, Baraboo, Wis.

Vredenburg & Company,

Printers, Rochester, N. Y.
Lithographers,
Engravers,
Binders,


FOR Nurserymen, Florists and Seedsmen.

NURSERY Catalogues, Price-Lists,
Stock Forms, Etc.

Send for Price-List of Supplies.

Seed Packets and Catalogues.

Lithograph, Hand-Made, Photograph and New
Process Fruit and Flower Plates.

 **SAVE** 10 to 25 per cent. by placing your
orders for Envelopes with us.

Colored Fruits and Flowers

FOR Catalogues,
Plate Books,
Circulars,
Cards.

VREDENBURG & COMPANY,

ROCHESTER, N. Y.

Note—Frontispiece of this issue of this Journal illustrates
our "NEW PROCESS" plates.

