



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The Wisconsin horticulturist. Vol. IV, No. 2 April 1899

Wisconsin State Horticultural Society
[s.l.]: [s.n.], April 1899

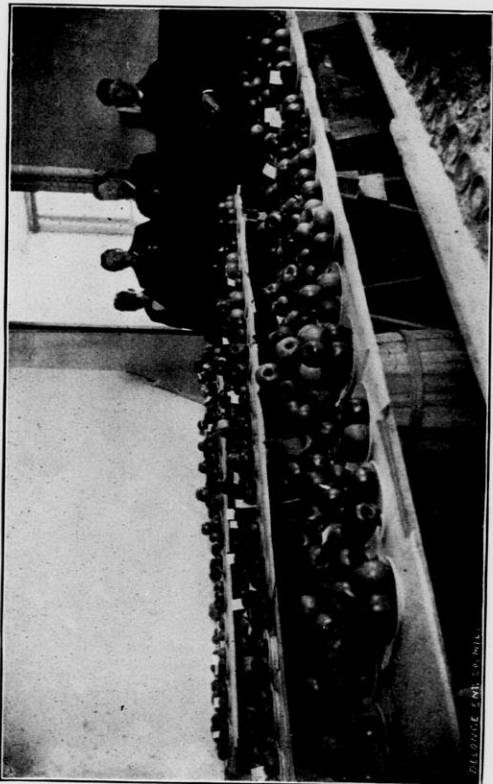
<https://digital.library.wisc.edu/1711.dl/LK2CZCWR3LLUK8T>

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.



The Fruit Exhibit at the Winter Meeting.— See page 34.

The Wisconsin Horticulturist.

VOL. IV.

APRIL.

NO. 2.

WHAT WILL BE THE OUTCOME?

E. S. Goff, Professor of Horticulture, University of Wisconsin.

[This article was written for the March Horticulturist but did not reach us in time on account of the March number going to press a week earlier than usual.—Ed.]

Many fruit growers are querying as to what is to be the outcome of the severe cold during the current winter upon fruit trees and flower-buds. It is doubtless too early to fully answer these questions as yet, for all of the effects of the cold can hardly be expected to appear until we have had a few days of warm weather. If we may judge from present appearances (Mar. 3) the cherry flower-buds are not all destroyed in our Station orchard, and even those of the European plum show some signs of life. The terminal twigs of some late-growing apple trees are already brittle, and many apple trees show orange-colored pith some inches back from the terminal bud. The young wood of most of our pears is badly darkened at the pith, though that of the Vermont Beauty, a variety that I am watching with considerable interest, appears to be scarcely at all injured.

It will be interesting to compare the severe weather of the present winter with that of the memorable winter of 1884-5. I have looked up the records of the Washburn Observatory (of Madison) for this purpose and will present a few figures for the benefit of readers of the Horticulturist.

I find that during the winter of 1884-5 the mercury

registered below zero one day in November, 10 days in December, 18 days in January and 17 days in February. I do not consider March. The lowest point registered was 25 degrees below zero, on January 25. On three other days the mercury registered 22 degrees below zero, on one day 21 degrees and on two days it registered 20 degrees below zero. The aggregate of the below-zero readings for the winter, up to March first, is 535 degrees.

Comparing these figures with the registerings of the current winter, we find a marked difference, and a difference that offers much hope. During the current winter, the mercury registered below zero no day in November, only 6 days in December, only 8 in January, and but 13 in February. The lowest temperature registered was 27.5 degrees below zero on February 9, which is $2\frac{1}{2}$ degrees lower than any reading during the winter of 1884-5. Twenty-five degrees below were registered on February 10, 23 below on the 12th, 22 on the 8th, and 20 below zero on January 29. The total below-zero readings the current winter up to March first aggregate only 298.5 degrees as against 535 degrees during the winter of 1884-5.

I am informed, however, that the ground was pretty well protected with snow during the winter of 1884-5, while it was almost bare over much of our State during the cold period of the present winter. What effect this will have upon the roots of young fruit trees is a question that we may well ask with anxiety. The wide-spread freezing of water pipes indicates that the frost has penetrated much deeper than usual, and we may find that some nurseries and young orchards have suffered irreparable damage.

Experiment Station, Madison, Wis., March 3, 1899.

✽

“These horseless carriages are great things.” “Yes, indeed. I had one once.” “What did you do with it?” “Outgrew it.”—Jewish Comment.

WINTERS OF 1885 AND 1889.

ED. OF HORTICULTURIST:—Everybody thinks the past winter has been the equal of 1884-5. But that winter was preceded by a fall which put us in good shape by seasonable rains, and we had a favorable snow blanket most of the winter. In this regard the present winter is not as favorable, for up to Feb. 26 the southern portion of the state had very little snow. Last fall froze up in good condition, but the great danger to trees, plants and vines comes from the freezing evaporation caused by the continued cold of January and February of the present year. Following is a synopsis of the comparative temperatures of the two winters by a spirit gauge thermometer, from a record made at Janesville, Wis.:

1884-5,—November gave 3 days at zero or below, coldest, 3 below; Dec. gave 10 days at zero or below, coldest, the 22d, 30 degrees below; Jan. gave 19 days at zero or below, coldest, 22d and 28th, 30 degrees below; Feb. gave 16 days at zero or below, coldest 13th, —28 degrees; March gave 4 days at zero or below, coldest 17th and 20th, 5 degrees below. Total for the winter 52 days, aggregating 669 degrees at zero or below.

1898-9,—Nov. gave 4 days at zero or below, coldest 27th, 10 degrees below; Dec. gave 9 days at or below zero, coldest 14th, 9 degrees below; Jan. gave 8 days at zero or below, coldest 29th and 31st, 18 degrees below; Feb. gave 15 days at zero or below, coldest 9th, 30 degrees below. Total for the winter, not including March, 36 days, aggregating 320 degrees at zero or below.

GEO. J. KELLOGG.

✽

Then creaked and labored yet again

The wheels within his head,

To devise, for city garden plots,

A folding onion bed.

—Detroit Journal.

PLUMS THE PAST SEASON AT THE EXPERIMENT STATION,
UNIVERSITY OF WISCONSIN.

Frederic Cranefield.

[Paper read at the Annual Meeting.]

The bountiful crop of plums in the Station orchard last season furnished an excellent opportunity for a comparison of varieties and species. Nearly all of the native varieties in the orchard, of bearing age, bore a heavy crop and in addition to this many European and Japanese varieties fruited. We were able to enjoy plums from the last week of July, when Red June and Strawberry began to ripen, until November, when a few fruits of a tardy seedling were still to be found.

I will speak mainly of the native varieties, as it is generally conceded that these are the only ones that can be profitably grown in central Wisconsin. It is true that the foreign varieties fruited well here last year, but we cannot reasonably expect such mild winters as that of '97 and '98 every year.

The native plums of the U. S. comprise four species, viz.: *Prunus Americana*, *p. Chicasa* or *augustifolia*, *p. hortulana* and *p. rivularis*. The last mentioned species, however, includes only a few varieties, indigenous to the extreme southern portion of the United States.

The varieties of *p. Americana* are probably most valuable to Wisconsin fruit growers, on account of their extreme hardiness. Certain *Chicasa* varieties have proved quite satisfactory here, but if hard winters should fall to our lot again the flower buds of these would probably perish.

A brief discussion of a few of the most promising varieties follows. It is in order here to say that these are merely individual opinions formed from observations made at the station orchard only. I have had no opportunity to observe cultivated varieties growing elsewhere. In any case, it is a futile effort to recommend a list for all growers,

on account of the difference in climate and soils, as well as the difference in tastes. I realized this fully last summer. It was a dull day indeed when no discussion occurred between my co-worker, Mr. Moyle, and myself on the merits of some variety. In fact, we were both fully agreed on only one point; viz., that the fruit growers of the Northwest would have in the Americana plums the finest of stone fruits if it were not for what Mr. M. termed their "rhinoceros hide."

Among the varieties that fruited last year were the following:

AITKIN. The first Americana variety to ripen. The fruit is large, dark red and has a very thin skin with much astringency. It has been difficult to form any accurate judgment as to the productiveness of this variety, as we have but a single graft; judging from this I should not call it productive. It is very liable to attacks by the plum-pocket fungus, like all of the Nigra section. In my opinion, the chief point in its favor is its earliness.

CHENEY. This is not as early as Aitkin but in other respects resembles it closely, being equally susceptible to plum-pockets and attacks by curculio. Neither of these is high in quality.

FOREST GARDEN. An excellent plum; large, highly colored, flesh firm, juicy and sweet; as far as flavor is concerned all that could be desired. The skin, however, is thick and tough and the tree is not very productive.

HAWKEYE. A large and showy plum but has the old-fashioned wild plum characteristics too well developed, that is, coarseness of flesh and astringency.

HOMESTEAD. Has many good points in color, texture and flavor, but is too small for a market variety.

LATE ROLLINGSTONE. Rollingstone in all particulars except in season.

LA DUC. A pretty little plum, extremely early, and above the average in quality. Our tree has borne a good

crop every year for five years. This is a good variety for home use.

MANKATO. A very large late variety of considerable merit. Flesh firm and rich, resembling slightly the *DOMESTICA* in this respect. There is a story to the effect that this is a seedling of the German prune, but its undeniable Americana skin belies this.

MAQUOKETA. This has proved late, unproductive and poor in quality.

OCHEEEDA. This is one of the best plums in our orchard. Large, finely colored, handsome; midseason to late; flesh rich, with a thinner skin than most of the Americana varieties; very nearly free from astringency.

OWATONNA. Ripens earlier than Wyant and resembles it closely in size and shape; lacking in flavor.

PEACH. It is too bad that this plum is not a few sizes larger. In color it closely resembles a peach with abundant bloom; of good quality but much too small for market.

PIPER. Very large, productive, of good quality, an excellent market variety.

POTTAWATAMIE. An extremely productive variety belonging to the Chicasa section; thin skin, juicy and only fair quality; good for canning and jelly.

QUAKER. The best native plum that has fruited in our orchard; large, juicy and rich, with but slight astringency. The texture and flavor of this plum when fully ripe is not surpassed by that of any European variety.

ROBINSON. A Chicasa variety; very productive, fruit small to medium, round, juicy but not rich; when fully ripe not unlike the Marianna in flavor, or rather in lack of flavor. It colors long before it ripens. Three different parties who used this plum for jelly, as well as other varieties, reported it better for this purpose than any other variety. The trees bore a very heavy crop and with the Pottawatamie were the most profitable trees in the orchard.

ROCKFORD. This, for some time, was taken as the

standard for quality among native plums, but we now have several that are much better in quality; flesh firm; fair in quality; skin tough and astringent. The tree usually overbears. It is, however, a reliable bearer, our tree having borne a full crop every year since it arrived at bearing age.

ROLLINGSTONE. A very good plum; large; fine color; quality good; late and productive; a good market variety.

SMITH'S RED. Belongs to the *Nigra* section of the *Americana* species; resembles Aitkin and Cheney, which also belong here; later than either of these; has but little to recommend it.

SURPRISE. Has been very highly recommended; in fact has been called the best *Americana* plum. We have been favored with only a few fruits, so far, on our one graft and these were certainly not as good, in my opinion, as Quaker or Forest Garden. Its thin skin is its redeeming feature.

SPEER. A productive variety of fair quality but not large enough for a market variety.

WILD GOOSE. This well known hortulana variety surprised us last year by yielding a bountiful crop. It is very early; large, with a beautiful color, thin skin, juicy, but of only moderate quality. Its size and color, however, make it a valuable market variety.

WOLF. Our trees of this variety have never borne for some reason. The trees have made an excellent growth and appear healthy and vigorous, but have borne no fruit.

WYANT. This is probably as well known as any native plum. It is large, oblong and flattened; late and productive and above the average in quality, but not equal to Quaker, Forest Garden or Rollingstone.

This list comprises less than one half of the native varieties that fruited, but includes the best. All belong to the *Americana* species, except Maquoketa, Pottawatamie, Robinson, Wild Goose and probably Surprise. Of these Pottawatamie and Robinson are *Chicasa*; Maquoketa and Wild Goose are hortulana; and Surprise is probably a hy-

brid between Americana and Chicasa or hortulana. If I were able to produce a plum my ideal would be a fruit with the texture and flavor of Quaker and the skin and color of Wild Goose.

Owing to the favorable winter of '97 and '98 nearly all the domestica and triflora varieties in our orchard fruited abundantly last season. A brief discussion of these may be of interest.

It is difficult to imagine a more striking or beautiful sight in the line of fruit than presented by the Japan plum trees in the Station orchard last summer. The trees of these varieties are tall, vigorous growers, with "willowy" branches unless severely pruned. Ours had not been so cut back and many of the branches were borne to the ground with the weight of the fruit. The following Japan varieties fruited: Abundance, Bailey, Berckman's, Burbank, Maru, Normand, Red June, Strawberry and Wickson. All except the Strawberry are much larger than any of the natives; highly colored, as a rule, and with a thinner skin than the Americana varieties, but not thinner than that of the Chicasa varieties. As to quality, we have in this list, good, medium, indifferent, and poor. I have tasted no plum or peach of any variety that possesses the richness and high flavor of Berckman's. It is all that could be desired in a stone fruit.

ABUNDANCE seemed to me next in order, with MARU or Red June third. Strawberry is small, not larger than La Duc and the earliest of the list. Red June is also early and high in quality. BURBANK is larger and earlier than Lombard but not as good. WILLARD is early but tough and tasteless. BAILEY is very late and may be classed with Abundance in quality. WICKSON is immense in size, one specimen measuring six inches in circumference; quality fair.

If the flower buds of the Japan varieties would endure our winters as well as those of our native varieties I am

sure that they would entirely supersede the natives. As it is, however, only amateurs and others who can afford to wait four or five years for a crop can afford to grow them.

Of the domestica class the following varieties fruited: Bradshaw, Frotheringham, Green Gage, Hungarian, Lombard, Orel No. 19, Orel No. 20, Orleans, Weineity, Yellow Dame Aubert and Moldavka.

BRADSHAW is the largest of all and a very good plum. FROTHERINGHAM is small, oblong, flattened, tough and somewhat lacking in flavor. Green Gage and Lombard are both well known varieties. Our GREEN GAGE trees are now about eight years old and have borne three full crops in the last five years. In the intervening years, however, no fruit was borne.

The LOMBARD tree could not possibly have borne more fruit. Every available inch of fruiting wood was covered. I never realized until last year that the Lombard is such a poor plum.

ORLEANS is larger than Lombard and much like it in other points.

HUNGARIAN, Orel No. 19, Orel No. 20, Yellow Dame Aubert and Moldavka, the two last named identical, are all European plums from the list imported by Prof. Budd. These are all large and showy, fairly productive, tough and unpalatable. Not one of the lot is equal to Wyant or Rollingstone in quality.

Mr. Cranfield's paper was followed by a very interesting talk on plums by A. L. Hatch, who has large plum orchards on his fruit farm in Sturgeon Bay. Mr. Hatch described his orchards, both commercial and experimental, naming the varieties planted. The European and Japanese plums appear to take more kindly to the Sturgeon Bay peninsula than to some other parts of the state.

Mr. Hatch is confident that the American varieties of

plums, if properly understood, would place home-grown fruit within the reach of every farmer in the state. American plums are too generous in bearing and the crop should be thinned or they will bear themselves to death.

Mr. Hatch named De Soto, Rollingstone, Wolf and Quaker for farmers to plant. "If you want a fine plum and are willing to give it good care take the De Soto."

Mr. Guilford, of Iowa.—In growing for family use I would always have De Soto, and even if you are growing for market have De Soto, too, because there are so many intelligent ladies who will put up De Soto in preference to any other. Forest Garden is large and of good quality.

Following that I will put in the Hawkeye. A well-grown Hawkeye is as large as the Lombard. The Hawkeye, is, I suppose, the largest of the native plums. The Wyant is a remarkable plum. It is a free stone, dark red, and is so fleshy it will peel like a peach. The Wolf is a large plum, something like the Ben Davis apple. If you want to have great big crops and big plums, and plenty of them, why have the Wolf. It is almost a free-stone. Now in regard to our late plums. We have not a reliable late plum. The Wolf will probably be late enough, the Minerva may be a little too late. It is obstinate about bearing, so we do not care much about it. The Rollingstone, originated by Mr. Lord, of Minnesota, is a better cooker than the De Soto. The skin dissolves, and passes off in cooking. The flesh is green. It is not exactly a free-stone but very nearly.

PERFECT STRAWBERRIES.

ED. WIS. HORTICULTURIST:—

Too much care and thought cannot be given to the question of perfect and imperfect varieties of strawberries. Whenever a pistillate is recommended its mate should be

mentioned or caution given not to set it alone. When Mr. Risley recommends Bisel, Barton and Windsor, page 34, February number, the fact that they are all imperfect should be stated. These three are all good and may be among the best, but all varieties are better adapted to some soils than others. Windsor is valuable as a late pistillate.

Some of our fruit men differ with me in regard to the relative productiveness of the perfects and pistillates. Within the last ten years there have come to the front plenty of perfect-flowering varieties that out-yield and are hardier than our best pistillates. When the Crescent was introduced nothing superseded it in vigor and productiveness. It lacks in size but I know of no pistillate that can put more bushels on the market than Crescent, even now.

Warfield has better color, ships better and, if it did not fail in time of drouth, nothing among the pistillates could take its place. Haverland is most productive but too soft. Bubach skips a crop once in about four years. Eureka is valuable as a late berry, but uneven in size.

The following perfects have been before the public long enough and are a success everywhere, and I see no use recommending any pistillates to the farmers and amateurs while these are so very productive and have all other good points:

Wood (Beder) for early, large, firm and productive.

Lovett, medium early, large, firm and productive.

Splendid, medium early, large, firm and productive.

Clyde, medium early, very large, firm and very productive.

Enhance, late, large, rough, FIRM, and very productive.

Wm. Belt, one of the fancy extra large kinds.

Perhaps this is enough, but as long as one cent apiece will get this whole collection, 25 of a kind, by mail, what is the use of wanting anything better? This is not written for commercial growers; they can plant what they please. So can others, but when any one says the pistillates are more

productive than the perfects I must object. But, they say, you are only growing a small quantity. Well, as long as we have nine acres in one field and my boy brought in 24 quarts picked in 20 minutes and a German boy of 14 years picked 230 quarts of these perfects in 10 hours, the rows 40 rods long and all alike, I do not look for anything better right away. Yet we are trying the best new and shall hold fast to the best old and try to keep pretty well to the front of the Strawberry procession.

GEO. J. KELLOGG.

Janesville, Wis.

P. S. Mr. B. F. Adams, of Madison, who has made big money on Crescent and Warfield, says his sales the past season were \$100 better because he had these newer varieties adding size and attractiveness to his berries.

G. J. K.

"WHO SHALL DECIDE WHEN DOCTORS DISAGREE?"

ED. WIS. HORTICULTURIST:—

The seeker after horticultural knowledge is often perplexed by the conflicting statements of horticultural teachers. On page 135, Wisconsin State Horticultural Report for 1898, A. D. Barnes says: "Seed your orchards to clover and mulch liberally." At Farmers' Institutes this winter R. J. Coe has told us to "cultivate your orchards and don't seed them down and don't mulch."

These gentlemen do not limit their teachings by local conditions, but make their statements as though they were horticultural truths of general application, and so the amateur is led to exclaim: "When doctors disagree who shall decide?"

Can we not hear from other orchardists on these points of cultivating, seeding down and mulching the orchard, then we might be guided by the preponderance of testimony?

My six-year-old orchard, on fertile clay loam soil, north

slope, has been cropped with potatoes and corn, fertilized with stable manure and ashes. A few of the trees have blighted some the past two years. Will seeding to clover check the rapid growth, prevent blight and make the trees more fruitful?

CHAS. L. PEARSON.

Baraboo, March 7, 1899.



A FEW FLOWERING VINES.

Frederic Cranefield.

The following notes on vines, the result of several years' observation, may be of interest to Horticulturist readers. The list given below includes mainly annual vines and, with one or two exceptions, may be easily grown from seed so as to blossom this year.

The old stand-by, Morning Glory, should head the list. I shall never try to discredit it; it is none the less beautiful because "everybody has it." The new Japanese strain of Morning Glory has not generally given satisfaction as I have seen it. The blossoms are larger and more intense in color than the common form, but are borne very sparingly and late in the season.

COBEA SCANDENS is easily second,—a vigorous grower with peculiar flowers that are scarcely handsome. It requires little or no training and will cling to any support within reach of its tenacious tendrils.

Scarlet Runner or Spanish Bean will give a splendid show of flowers through a long season; these are usually borne on long stems, making them of value for cuttings. The colors range from scarlet to white, with one or two purplish shades; the foliage is rather coarse; the seed should not be planted until May 20th.

The Canary Bird flower is an old timer but has been largely displaced by the commoner Nasturtiums on account

of their larger flowers, yet it is not to be despised. The vine will make more growth than the Nasturtiums and is more attractive.

The Egyptian or Hyacinth Bean is sometimes advertised as a beautiful climber. It is not beautiful, neither will it climb, more than a foot or two; both foliage and flowers are coarse and commonplace.

Mina Lobata is a handsome vine from Mexico, with large, dark green, deeply lobed leaves; it has but one serious fault and that is its late season of blooming; in order to enjoy its flowers the seed should be started indoors in March or April.

Thunbergia is a pretty, low climber; it will rarely climb above three or four feet. The flowers are borne in immense numbers all summer; the colors are mainly different shades of yellow, buff, orange and brown, commonly with a black center, or at least nearer to black than any other flower that I know of.

Clitorea, or Butterfly Pea, bears beautiful blue flowers in the greatest profusion. The vine is a rapid grower and of the easiest culture; it is a native of the southern states. Centrosema closely resembles the above but the flowers are not so showy.

The cypress vine has delicate, finely cut foliage and small scarlet or white blossoms; it requires very rich, mellow soil in order to do well.

Madeira vine is an excellent vine and free growing but requires considerable aid in climbing as it is not a free twiner; it grows from tubers.

Cinnamon vine and Apios are two rank, coarse vines, scarcely worthy of culture; either, however, is preferable to Ipomea Pandurata or "Man of the Earth," which becomes a serious pest if allowed to escape from cultivation.

The Moonflower is much talked about but often proves unsatisfactory. It rarely blooms the first year from seed sown in the open ground. The flowers are immense in size

and heavily fragrant and open only at night, as the name would suggest.

The Balloon vine is but a poor climber and has but little to recommend it. The leaves are rough and harsh and the flowers inconspicuous; the inflated seed-pods are conspicuous late in the season.

Lathyrus, or Perennial Pea, blooms the first year from seed and is perennial as its name indicates. The flowers are pink in color and resemble Sweet Pea blossoms in shape. They are borne in clusters of six to ten; excellent to cover fences.

The Wild Cucumber makes a tremendous growth but is too coarse to be ornamental; it is an ideal vine for a screen. This list comprises only quick growing vines that may be used for ornament or screens. Morning Glory, Cobea and Madeira vine are most desirable for porches.

Experiment Station, Madison, Wis.

MAKING LAWNS AND WALKS.

C. Phillipson.

Read before the Algoma Horticultural Society, March 21, 1899.

In the first place, the space in front of the house, and generally the sides exposed to view from the street, should be in grass. Get a good plat of grass and dry, neat walks, and other things will soon follow with but little trouble. The very first thing needed in improving ground is to obtain good drainage. Have good drains made to carry off all waste water from the house and surplus water from the soil. Have the work well done, for this is the foundation of all improvements and a correction of any failure is made only with a good deal of trouble and expense. This secures a dry soil at all seasons of the year and a healthy growth of plants and trees. The next thing is to prepare the soil

and make the walks. Make no more roads than are absolutely necessary, as many walks divide the lawn and greatly disfigure it. Of course there must be a bold walk to the front door, and one passing from this to the rear of the house and in general no more will be necessary. These must be made in the most convenient places, in paths one would naturally take in going from one place to another. The curved line is the line of beauty, yet we often see attempts at curved walks where a straight one would be much better. Every curve should be a sensible one, that is, have a reason for its course, therefore arrange your planting so as to make an apparent necessity for every turn.

If the ground to be improved is only a small lot it can be done best by the spade. Mark out the walks first. Do this by setting up little sticks on the line you design for the road, changing them until you get just the curve that seems graceful and pleasant to the eye. Put a row of sticks on each side of the road, measuring carefully so as to get the width uniform; next remove the earth from the walk to about the depth of eighteen inches, using it to fill up any low places. The operator is now prepared to pulverize the soil with the spade. Have it done thoroughly, sending the spade well down and completely inverting the soil but leaving about six inches on each side of the walk undisturbed for the present, so as not to break the line of the road. All stones found in digging should be thrown into the road, and, often, enough can be obtained in that way to fill within six or eight inches of the surface; if not, enough can be procured usually without much difficulty. When the walks are filled to within six inches of the surface of the soil, the ground being raked off nice and smooth, dig the six inches left undug on the edges of the walk, being careful to keep the edges true. This work should be done as early as possible in the spring, so as to give the grass the benefit of the spring showers. Sow some good lawn grass mixture at

the rate of 4 bushels to the acre, raking it in, and, if dry, it is well to roll the soil after sowing.

About the middle of July the grass will need cutting and, after that, must be cut as often as the lawn mower can get a bite. These lawn mowers are a real blessing for not one in ten thousand can cut a lawn properly with a scythe.

After sowing the grass, finish the walks by covering the rough stones with five or six inches of gravel as clean as can be procured.

In large places the plow can be used instead of spade. In that case the whole lot should be well plowed and dragged before the walks are staked out.

PLANTING AND ORNAMENTS THE LAWN.

The main part of the lawn should be left unbroken by any tree or shrub, as a general rule, with only an occasional fine specimen, like the cut leaved birch; but plant for the future, not the present, and always have in view the size and form and habits of the trees when full grown.

In the center of the lawn, especially if opposite a window, it is well to make a round or oval bed and on the border or near the edge of the lawn, beds of various simple forms. These beds should be filled with flowers that will keep in bloom during the whole season, and it is best generally to have but one kind in a bed. Phlox Drummondii, verbena, scarlet geraniums, cannas, are well adapted for this purpose. For a bed of tall foliage plants I would advise something like the following: Ricinus or cannas, for the center; if the center is Ricinus, they may be surrounded with a circle of cannas. The next circle should be Caladiums with an outside border of Coleus or Centaurea (Dusty Miller).

These beds, it must be remembered, are for the adornment of the ground, and they furnish no flowers for the house, no presents for friends. (These we must have, so back of the lawn make generous beds of flowers that you can cut freely.) The most popular Bedding Plants are the

foliage plants and Geraniums. Among the former may be found, Ricinus, Cannas, Caladiums. The numerous varieties of Coleus vary in color from golden yellow to bronze, and some almost black. These with a border of some white leaved plants form a pleasing sight. Where bright flowers are wanted, there is nothing that will take the place of the scarlet Geranium.

Of all the adornments of the lawn, nothing is more effective than a well filled and well kept vase. Almost anything will look well if adorned with healthy and, particularly, drooping plants. All the ornamental leaved plants are appropriate for the center of the vase, while the drooping plants should be planted near the edge and allowed to droop at least half way to the ground. For this purpose, nasturtiums, vincas, petunias, verbenas, ivy leaved geranium, will answer. The evaporation from vases is very great, as every side is exposed to air and sun, and they must receive a copious supply of water every evening.

CRIMSON CLOVER AND GRAPES.

Mr. J. B. Risley, of Merrimack, Sauk county, Wis., is justifiably proud of the magnificent grapes he raised last year. His Concordes produced many bunches which weighed a pound each. Mr. Risley attributes this, in part, to crimson clover. He thus gives his experience: "Aug. 12, 1897, immediately after cultivating the grapes the last time for that season, we sowed 25 pounds of crimson clover seed on the $1\frac{1}{2}$ acres of land in grapes that were in bearing. The catch was fair and wintered well, grew well through the Spring and was in blossom early in June, when it was plowed under and the land cultivated twice. As nearly as I could judge there was 25 per cent. increase in vine, 25 per cent. in size and quality of bunch and 40 per cent. increase in crop, over the previous year."

FLOWERS ON FARMS.

Letter from the Farmers' Friend, Jonathan Periam.

Under the above caption the Chicago Inter-Ocean prints a two-column article so interesting and practical that we regret the lack of space to reprint it in full. Below are a few of its suggestions:

"Arbor day is near. Why not utilize the spring time to plant out some hardy flowering trees and shrubs about the homestead? There is yet time to order them. Do not get trees from the thick forest; nor should you seek to set out large specimens. Plant small trees and shrubs, and watch them grow."

"What nicer thing than the June berry (*Amelanchier*), with its white panicles of flowers covering the entire tree with a mass of bloom, or its whitish, silky-like leaves, which in the autumn turn to a deep red or rich yellow?"

HOW TO PLANT TREES.

"When received from the nursery, if not ready to be immediately planted, heel them in, in a shady place, covering the roots carefully. Dig a hole larger than the spread of the roots, and if the soil is not naturally rich cast away the subsoil and fill in with rich loam containing no sods. Tramp the filling rather solid, and upon this set the tree, so the neck of the tree will stand about the same depth as when in the nursery—if anything, near an inch lower. Spread the small fibers out carefully, and cover with earth, well packed around the roots; cast in some more earth and tramp solidly, keeping the toes of the boots toward the stem of the tree, which should be held upright. Then, if the soil is dry, saturate with water, and when dried away fill in moist earth to level all nicely. The second year is often the most dangerous to the planted tree if drought sets in. When it is necessary to water, drench the soil deeply, about once in two weeks, if necessary."

WHAT TESTS SHALL A VARIETY HAVE BEFORE BEING PERMANENTLY PLACED ON THE FRUIT LIST?

A Paper Read by B. S. Hoxie, at Galva, Ill., Dec. 14, 1898.

MR. PRESIDENT, LADIES AND GENTLEMEN:—I am fortunate in one respect at least, this evening, in the fact that some one has selected this subject for me. So bear in mind, if I make mistakes in treating the question, it is only of opinion, and yet I sometimes think an opinion founded on observation and mature judgment is worth something. The questioner might have had in mind ALL of our fruits but I shall confine myself mainly to the apple, that king of all fruits, which stands without a peer in the known world. There are two points which must be considered in discussing this question, viz., quality and adaptability. But, after all, this matter of quality is more of the imagination than the most of us are willing to admit, for good looks are too apt to take the place of quality. So really adaptation is what we of the Northwest must seek for in establishing our standard for permanency. I have seen hundreds of men buy a large, showy Ben Davis and munch it down as one of the best, or a fine looking California pear and call it luscious. So you see there is as yet no standard of quality, as men would weigh out a ton of coal or measure a yard of cloth. But of that I will speak later on.

Adaptation is quite another problem for the fruit grower. It would be idle folly to attempt to grow oranges in Iowa, Wisconsin or Illinois, and just as presumptuous for the ranchman of Los Angeles to think of growing fine apples in his orange grove. There is a quality of soil and climate which must be demonstrated by trial and long experience before we can say such, or such, variety can succeed, and among all the varieties of apples it is not a hard task to count the number of REALLY valuable ones. For instance, Canada had over three hundred varieties of apples at the World's Fair. As I inquired of the exhibitors for six or eight of the best varieties ALL points considered, I give you

their answers. ONTARIO,—Astrachan, Duchess, Gravenstein, Northern Spy, La Rue and Wealthy. QUEBEC,—Duchess, Alexander, Fameuse, Mackintosh Red, Scott's Winter, Canada Baldwin and Wealthy. NOVA SCOTIA,—Golden Russet, Gravenstein, King of Tompkins County, Rhode Island Greening, Alexander and Northern Spy. BRITISH AMERICA,—Spitzenberg, Yellow Bellflower, Fameuse or Snow, Ben Davis and McMahan. Now this kind of a list might be extended with a like or similar result, to the states, east, west and middle, in the United States. So we find that adaptation is the first test. TIME AND TRIAL. How long, you ask? How many years? History makes record that the sweet oranges of Italy were nearly all killed in 1709 by a hard and unheard of winter up to that date. The trees were all grafted again with the same varieties, to be killed once more in the year 1763; then a new departure was made. Seeds were planted and from these came a quality of oranges in many respects better than the original, and better adapted to soil and climate.

I have always been an advocate of SEED PLANTING. I would also favor scientific fertilization for the tree fruits, but when you come to look up the history of our best apples and pears, and even of our grapes and other small fruits, you will find the best of them were left to shirk for themselves, with kind mother nature.

With our Wisconsin apples I think this true in every instance, and I will mention some which have been most widely disseminated. The original Wolf river is now forty-five years old and has never missed a crop since 1862. In 1860 some seeds from the Alexander were planted by Mrs. Isaac McMahan, in Richland county, Wis.; two of these grew and one produced the famous McMahan apple. In 1849, '50 and '52, seeds of the Duchess were planted in Waupaca county and from these we have the Duchess in tree, as to hardiness, but in some respects a better fruit with longer

keeping qualities. I will also mention Northwestern Greening and Newell; both were chance seedlings and were grown for years before the Wisconsin Society thought best, or dared to put them on the permanent list. A number of years ago the Wisconsin Society offered a premium of \$25 for the best seedling apple, after a five-year test, and the prize was awarded to Mr. George P. Peffer, of Waukesha county, for the Pewaukee; and now, after a test of nearly a quarter of a century, we do not dare to place this on the permanent list for general cultivation. E. W. Daniels, of Waushara county, who disseminated the Northwestern Greening many years ago, after repeated requests to have the Society give their endorsement to his apple, never succeeded while he was living to realize more in this direction than to place it on our list as recommended for trial; and yet in the fall of 1892 we awarded the first premium to a bushel of Northwestern Greenings. I may also make mention of one other called the Avista, which has never failed of a crop for more than twenty years. Now what tests have we applied to these? Hardiness and ADAPTABILITY have been the first to apply and I have shown that we have not been hasty in placing any of our Wisconsin varieties on the list PERMANENTLY. Shall I say, let us wait another winter?

Now before we decide let us examine some other points. While I have mentioned quality as coupling it with ADAPTABILITY, I did it with reference more to general tastes than to the cultivated tastes of the lover of fine fruits, for when we compare the fine flavor of a northern grown Jonathan with the native crab, there is a wide margin of difference. So flavor, between these two points, might be subordinate to some other qualification.

THE TREE.

I would have the tree strong and vigorous in its habit of growth, somewhat inclined to a spreading top, with clean, healthy foliage, carrying its fruit well to the close of the season. The fruit should be of bright color, and if red, or

blush, all the better—for a young man the more often falls in love with a bright face and sparkling eye than with the sallow complexion. The flesh must be crisp and fine grained, firm and smooth exterior, large and fair, but not too large. The tree or variety must be productive but not inclined to overbear, and for varieties they must have good keeping qualities. I would have all of these qualifications in an eminent degree, and subordinate as many others as possible before I would say I have a perfect fruit to be permanently on the list.

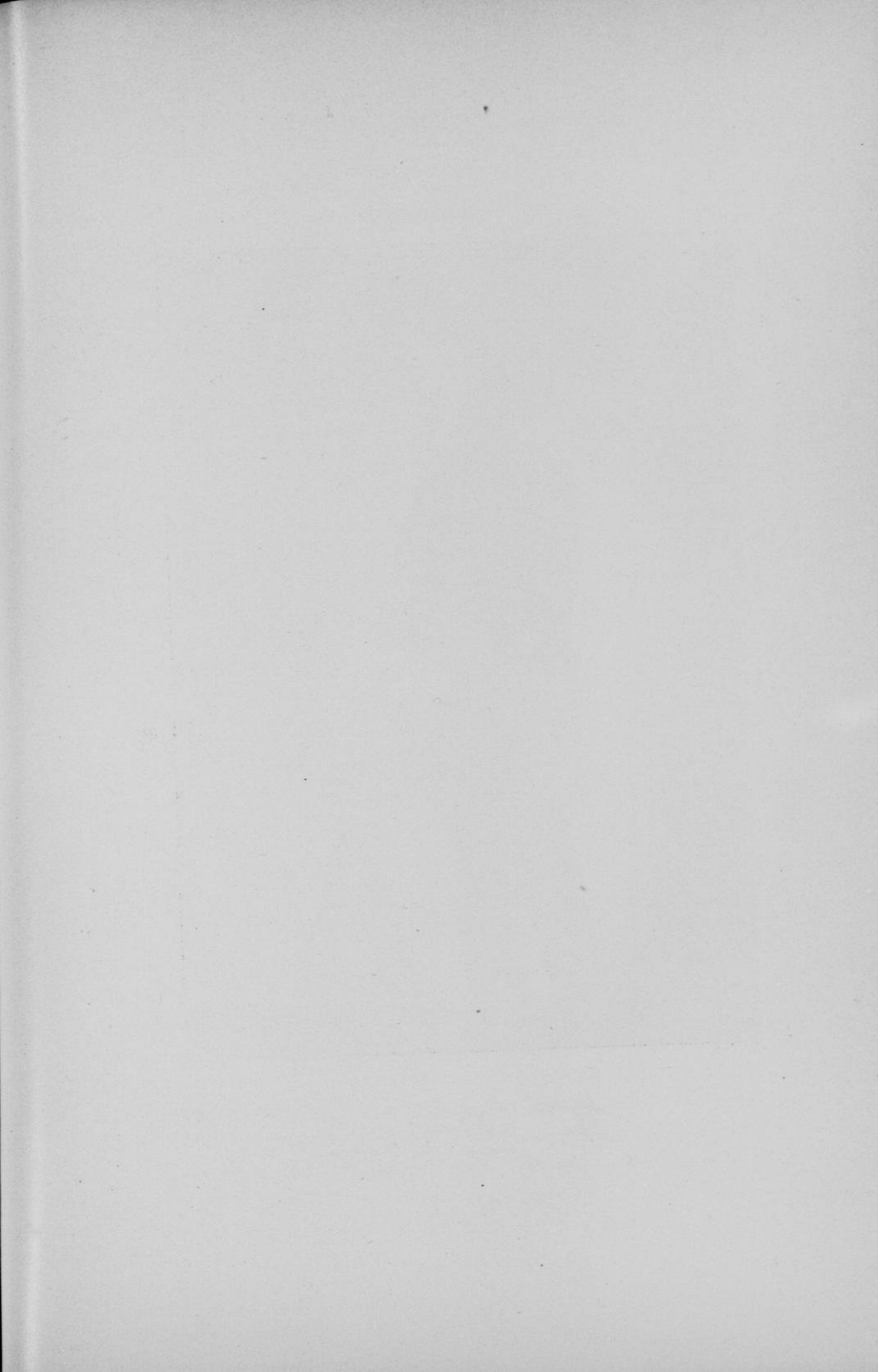
Does any one say these are hard tests? I think not if they are properly analyzed and understood, for I have said we cannot raise oranges in the Northwest, nor fine apples in Southern California, neither are all the varieties which I have mentioned equally as valuable grown in northern temperate latitudes, but as a general rule the further north a given variety can be successfully grown the better the quality, this many of you have noticed between the overgrown Jonathan, of Missouri, as compared with the same variety in Northern Illinois or the Bellflower of Canada compared with the same variety on the Pacific coast. Now, while a Ben Davis is a Ben Davis wherever grown, though varying a little in quality, and a Baldwin the same, while we continued to make off shoots, what remains for the fruit grower of today? He must adopt nature's methods or a large portion of our country must go without fruit. What if it takes ten, twenty or fifty years to test the variety? Who gave us the fine apples we find in the market today? Most of the noble hearted men who planted apple seeds in Wisconsin forty and fifty years ago are now in the land of the beyond, but many of us cherish their memory and would build altars of loving affection over their tombs. That venerable originator of fruits, F. W. Loudon, of Janesville, Wis., a man now over eighty years old, told me three years ago that if he was sure of twenty years more of active life he would produce an apple superior to any yet grown in the

state. What I have said about the tests for apples will, in a large measure, apply to all fruits, but while we consider that the strawberry is grown over a larger extent of territory than any other fruit, yet here is a great diversity of opinion as to the best or the six or eight best varieties. Hardiness, productiveness and quality must be the supreme test with this. For the discriminating public today, even, has not learned to decide between the sour Wilson or some of the later, and, we say, much finer varieties. I am firm in the opinion that the Western and Northwestern States can produce apples which shall take rank with any grown in the United States, but they must be largely to the manor born. The variety may now be growing in some obscure corner that shall be superior to any grown in Ohio or New York. In my opinion we of Wisconsin are a long way on the road to this objective point. But remember, friends, I have in these remarks been giving you ONLY MY OPINION.

THE SAN JOSE SCALE BILL.

Hon. Chas. Hirschinger, chairman of our Legislative Committee, writes: "The bill has passed the Senate with an appropriation of \$300 and I do not expect any difficulty in the House as to its passing. The bill does not go into effect until June 1, 1899, hence it will not interfere with spring deliveries. It is now about certain that no neighboring State will be able to pass a drastic bill. Minnesota has modified its bill so that no bond shall be required. Our bill may not please all, but will provide for inspection and prevent us from being shut out of other states. It has now passed the Senate with only one amendment; the bill called for \$600 appropriation and it passed with only \$300."

The bill will be printed in the Horticulturist after it becomes a law.





J. C. Plumb

IN MEMORIAM.

J. C. Plumb died at his home in Milton, Wis., March 19, 1899, after a painful illness of more than a week, the result of an accident. He was hauling a load of wood, when a wheel came off from the wagon, throwing him to the ground and the wood upon him. Mr. Plumb's death is a deep bereavement to the Wisconsin State Horticultural Society and he will be mourned by horticulturists throughout the country. John Calvin Plumb was born Dec. 1, 1828, in Stockbridge, Mass., among the beautiful "Berkshire hills," and was the youngest of nine children. His father, Joab, born in the same county in 1776, traced his lineage back to the Normans of the twelfth century. When Mr. Plumb entered the nursery business and made tree-growing his profession, he was but following an inherited taste, for his father and his father's father had been engaged in the same work.

When he was a lad of twelve years the family moved to Oberlin, Ohio, and, in 1843, to Lake Mills, Wis. In early manhood he was engaged in the nursery business in Madison for a time. But in 1868 he and his son Malon founded the "Green Hill Nursery" at Milton, which has since been the family home. In prosperous times the annual planting of this nursery was 100,000 trees, reaching 325,000 one year. The sales extended to the Pacific coast on the west and the Gulf of Mexico on the south and amounted to several thousand dollars annually.

Mr. Plumb was a scholarly man, being especially interested in geology. His practical knowledge of the soils of Wisconsin and the adjoining states was wonderful. About five weeks before his death, A. J. Philips, secretary of the State Horticultural Society, sent him some apples, grown near Shiocton. Mr. Philips says: "He wrote me at once, describing the geological formation of the town where those trees are growing, which I had found, on my visit there, to

be exactly as he described it; also telling me how far west the same conditions extended, in what other localities the same conditions were found, and that those places were the best apple lands of the state."

Mr. Plumb was an authority on fruit nomenclature, and was at one time a member of the general fruit committee of the National Pomological Society. He has been called the "father of the Wisconsin State Horticultural Society;" he was one of its charter members, called its first meeting, wrote its first constitution and was elected its first secretary. At the recent annual meeting in Madison he read a valuable paper on the Origin and Description of Our Northern Apples.

When the Plumb family came to Wisconsin they brought with them several seedlings they were raising. One of these seedlings was the PLUMB CIDER, which has proved a very valuable apple for the Northwest.

For fifty-nine years Mr. Plumb had been a member of the Congregational church. He had served the church at Milton as trustee, deacon, clerk and Sunday School Superintendent, having been its clerk for twenty-eight years. His temperance principles were as strong as his religious convictions.

The funeral services, held March 22, were conducted by his pastor, Rev. A. L. McClelland, assisted by several other clergymen. Prof. Whitford spoke of his work in the nursery business and his work in connection with the college. J. T. Wright, of Janesville, paid a worthy tribute to Mr. Plumb for his active co-operation for many years in the Sunday School work. Prof. Goff, of the Wisconsin University, George J. Kellogg, of Janesville, and F. C. Edwards, of Fort Atkinson, represented the Wisconsin Horticultural Society at the funeral. The Secretary and other members would have been present, had they known in time.

Mr. Plumb had been twice married and is survived by Mrs. Plumb and eight children.

Ed.

HORTICULTURE IN THE "ROUND-UP" INSTITUTE AT SPARTA.

ED. HORTICULTURIST:—The Omaha Exhibit was presented in a very interesting manner by A. J. Philips, Secretary of the State Horticultural Society. The success of his seedling apples was brought to the front and the discussions were lively.

"Apple Culture" was presented by Mr. Franklin Johnson, of Baraboo, and listened to by a large and interested audience. The discussion brought out many interesting facts and methods.

The premium lists drew a large and magnificent show of plants and cut flowers. Especial attention was given to the exhibit by the lady florist, Miss Miriam Jewett. A visit to her extensive greenhouses was the privilege of your correspondent. We found her with a splendid collection of choice roses and some new and rare carnations, in quantities to supply an increasing demand. We cannot mention all the various branches in which she is interested; suffice it to say she has five thousand feet of glass in her establishment and the heating apparatus has cost well on to \$1000. Miss Jewett read a very interesting paper on the care and culture of house plants and gave an object lesson on the stage in making cuttings and potting cuttings and plants. She has promised some articles for our magazine which we shall all welcome.

G. J. K.

Clarence Wedge says, in THE FRUITMAN: If present appearances in our own orchard are good for anything, the man who talks Northwestern Greening and that class of nonsense to a Minnesota horticultural society five years hence, will be hustled off to an idiot asylum. The Russians have their faults but they are of a kind that will be tolerated up here much longer than the faults of the varieties so highly praised by our Wisconsin and central Iowa brethren.

TREATMENT OF WINTER-INJURED TREES.

Bulletin of Kansas Experiment Station.

Trees that are killed should be removed at once from the orchard. If they can be used for fire-wood well and good, if not they should be piled and burned to destroy any insects or disease that may infest them. Trees that are partly top-killed should be heavily cut back, the extent depending upon the degree of injury. In many cases it will be necessary to cut back to the main branches or even to the trunk, but where the injury is less severe the cutting may be confined to the smaller branches of the tree.

Professor Bailey, Cornell University, says upon this subject: "The proper treatment for frozen-back trees must be determined for each particular case; but it should be borne in mind that the injured portion is no longer of use to the plant, whereas it may be a positive detriment by accelerating the evaporation of moisture. The best treatment for plants seriously injured upon the extremities is to cut them back heavily."

Trees treated in this way will rapidly regain their vigor unless the injury is very serious. They will also quickly resume their normal habit of growth and shape. Where blackberries and raspberries have been killed back to the ground, the canes should be cut out and burned.

A difference in opinion exists as to the best time for cutting back injured trees; some growers prefer to have the work done before the leaves open, others choose a later time; but the safest way is to do it early. As soon as the degree of injury is known, therefore, we may wisely begin the pruning. A saw and tree pruners are the tools to be used. It will be beneficial to carry along a keg of white lead and apply a coat of the lead to the wounds made. This will keep out the air, prevent the wood from checking and retard evaporation from it. All pruned-off wood should be removed from the orchard and burned.

FOR THE HOUSEHOLD.

CARROTS.

Most people consider carrots fine food for stock. Farmers feed them to their cows because they will improve the quality, flavor and color of the butter; to their horses to make them have sleek, nice coats, but few farmers ever think of growing them for family use. They are a very healthful vegetable and help to make a variety that is always desirable for an appetizing meal. They are good cooked in several ways. Carrot pudding makes an excellent dessert for dinner and is made as follows: 1 cup grated carrot; 1 cup grated potato; 1 cup sour milk; 1 cup chopped suet, or $\frac{1}{2}$ cup of butter; 1 cup currants; 1 cup raisins; 1 teaspoon soda; 1 teaspoon cinnamon; $\frac{1}{2}$ teaspoon cloves; 1 teaspoon nutmeg. Add enough flour to make stiff and steam two hours. Serve with sauce. This pudding can be kept for weeks.

The nicest way to prepare carrots is to make what is called "Carrots in Lemon Butter." Scrape the carrots, cut in inch sections and soak in cold water until crisp. Cook in six times their measure of boiling salt water until tender enough to pierce with a broom straw. Drain and return to a hot place on the stove with one tablespoon butter, one-half teaspoon salt, one teaspoon sugar and a dust of pepper, for each pint of carrots. Cover and let it simmer until the butter has been absorbed. Pore over it one tablespoon lemon juice and one teaspoon chopped parsley (one teaspoon after it is chopped) just before sending it to the table. You will have a dish fit for a Wisconsin horticulturist and then I am sure you will make a place in your garden each year for a few carrots. It would be better for us to eat more fruit and vegetables and less meat. If we ate the fruit and vegetables I am sure we would soon give up the meat altogether. Plain living is conducive to high thinking.

VIE H. CAMPBELL, Corresponding Secretary,
Wisconsin State Horticultural Society.

QUESTION DEPARTMENT.

QUESTIONS ANSWERED.

1. What do you consider the best apple for commercial purposes in Wisconsin?—WINDSOR.

2. Which is your preference, Wealthy or McMahan?—Wealthy.

3. Which is the better keeper?—Wealthy.

4. If you were contemplating planting five acres; what would you plant?—Yellow Transparent, Duchess, Patten's Greening, Longfield, Fameuse, Wealthy, Dominion Winter, Milwaukee, Flushing Spitzenberg, Northwestern Greening, Windsor, Minklet, Malinda. This is for Southern Wisconsin, with local markets in view.

5. Do you consider a windbreak around an orchard a necessity?—No.

6. What do you think of the Longfield?—It is a barrel filler of medium-sized apples of good quality, and can be improved in size by thinning the small branches, also the fruit when small.—HENRY TARRANT, Janesville, Wis.

QUESTIONS FOR ANSWER.

1. Should a bearing orchard be cultivated?
2. Should the trees be mulched?

EDITORIAL NOTES.

Our frontispiece, the Fruit Exhibit at the Annual Meeting in Madison last February, is from a photograph kindly sent to us by A. A. Cannon & Son. The original photographs are larger than our half-tone reproduction. The photograph will be sent postpaid to any one on receipt of fifteen cents. Address A. A. Cannon & Son, Marcelloni, Columbia Co., Wis.

W. J. Moyle, formerly the business manager of the Wisconsin Horticulturist, has removed to Little Silver, New Jersey, where he has accepted a position with the Lovett Nursery Company. Although Mr. Moyle is no longer con-

nected officially with the Horticulturist, he has promised to be a frequent contributor. An interesting article from his pen will appear in the May number.

Sunday, April 9, was the sixty-first wedding anniversary of A. G. Tuttle and wife of Baraboo. Among the flowers sent in remembrance of the day was a large box of beautiful roses and carnations from J. S. Stickney of Wauwatosa.

George Townsend, at one time a member of our State Society, died suddenly April 2, aged seventy-nine years.

THE FRUITMAN, Marcus, Iowa, is a wide-awake little paper which we hold in high esteem. It will soon raise its subscription price to keep pace with its increase in size.

SPRAYING.

The only "spraying experience" which has come to our desk this month, is our own. Two years ago our acre of currants was badly affected with mildew. Last year we sprayed them before the leaves opened, with Bordeaux Mixture. Result, healthy foliage and fine fruit. We urge all Wisconsin Horticulturists to spray with the Bordeaux their apple and plum trees, as well as currant and gooseberry bushes, before the leaf buds unfold.

In looking over the one-year apple rows we find that all varieties below the grade in hardness of Duchess, Wealthy inclusive, are red-pithed. Now if we let them grow it means BLACK HEARTS two years hence; so we will cut them back to one inch. They will run up to three feet by fall; a second year's growth will finish them up, clean, bright trees, providing that their one winter exposed will not be a tester worse than the past, which is not probable. Our plea for offering the above is:

"Little drops of water,

Little grains of sand, etc., etc."

W. H. GUILFORD, Dubuque, Ia.

PROPRIETOR OF

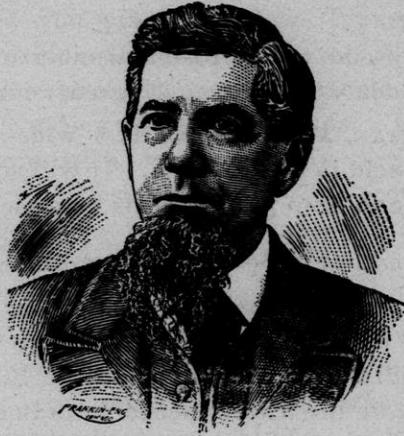
SAUK COUNTY NURSERIES

Where will be found a good assortment of Nursery Stock consisting of

Fruit and Ornamental Trees,

Shrubs, Roses,
Berry Plants,
Weeping trees,
of Currant bushes,
Ask for catalogue.

The report that I have
but after spring delivery
sell my farm and
135 acres land, good
to the right man,
I have a good trade



Grapevines, Evergreens,
Asparagus, Bulbs,
Shade trees and lots
Gooseberry plants, etc.
I sell direct to planters.

sold out is not true
I will be ready to
nursery and at a bargain,
buildings and a bargain
on easy terms.
but am getting old.

Address,

CHARLES HIRSCHINGER,

BARABOO, WIS.

Our Horticultural Visitor

Should visit every Fruit Grower.

Have you ever seen a copy? No? Well, send your name along on a postal card to Kinmundy, Ill. Will send you a sample copy free.

