LIBRARIES
UNIVERSITY OF WISCONSIN–MADISON

Wisconsin horticulture. Vol. XIX September 1928/August 1929

Madison, Wisconsin: Wisconsin State Horticultural Society, September 1928/August 1929

https://digital.library.wisc.edu/1711.dl/J6L5XONZV6VLQ85

This material may be protected by copyright law (e.g., Title 17, US Code).

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.

728 State Street | Madison, Wisconsin 53706 | library.wisc.edu

WISCONSIN HORTICULTURE

Vol. XVIV SEPTEMBER, 1928 No. 1

We invite you to come to Janesville now and select from our garden the Dahlias you wish for next year. They will be sent - - named and carefully packed - - in the spring.

Why not send some to that friend's garden?

Fitchett Dahlia Gardens

735 E. Milton Ave., Janesville, Wisconsin

TABLE OF CONTENTS

	Page
Horticultural Exhibits at State Fair	3
The New Annuals	5
Million Pounds Cherries Daily	6
Plants That Attract Birds	7
Society Meets at La Crosse	9
The State Potato Tour	11
Marketing Requirements	14
Minnesota Society Meets	15
Convention Dates Set	16
Premium List	16
Rural Planting Committee	16
About the Home and Garden	18
Potato Growers Department	20
Items From N. Dakota	21
Flower Shows	22
News From Our Local Clubs	22
Overcoming Horticultural Troubles	26
Flax to Linen	28
Cherry Picker Sets Record	31

Imported Holland Bulbs

200,000 finest quality at lowest prices. Orders taken now, and shipped on arrival about October 1.

Breeder tulips, aristocrat of the Darwin family in six or more of the best varieties for parks, cemeteries and private homes. Have something different than your neighbor. Only $4.00 per 100. Assorted varieties, $2.50 and up. Regular Darwin, $3.50 per 100. Best named varieties red, yellow, scarlet, pink, lavender, orange, $2.00 per 100. Best forcing varieties, $3.00 per 100.

No. 1 size Wm. Pitt, Bartigon, Princess Elizabeth, La Notre, Wm. Copland, Prof. Rauwenhof, Mad. Krelage, Clara Butt, Pride of Harlem, Farncombe Sanders, Snowdrift and Grape Hyacinths, $2.00 per 100.

Crocus—4 varieties $2.00 per 100. Fancy large $3.00 per 100.

Dutch Hyacinths, white, blue, pink, yellow, $5.00 and $8.00 per 100. Paper white for forcing $6.00 per 100.

Parrot tulips, 4 varieties $2.50 per 100.

Daffodils for forcing, mother bulbs $8.00 per 100. Emperor, Bic. Victoria, Sir Watkins, Callos White or yellow, 15¢ each. Daffodils for planting outside only $1.50 per 100. 75¢ per 100 Emperor, Sir Watkins, Bic. Victoria, Glory Sassenheim, Golden Spur, Von Sion, Spring Glory $3.00 and $5.00 per 100. King Alfred, $3.00 and $5.00 and $8.00 per 100 cash.

W. W. Thompson & Son

Station D. Route 1, Box 913 **Milwaukee, Wis.**

SB21
.W7
v.19-20

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

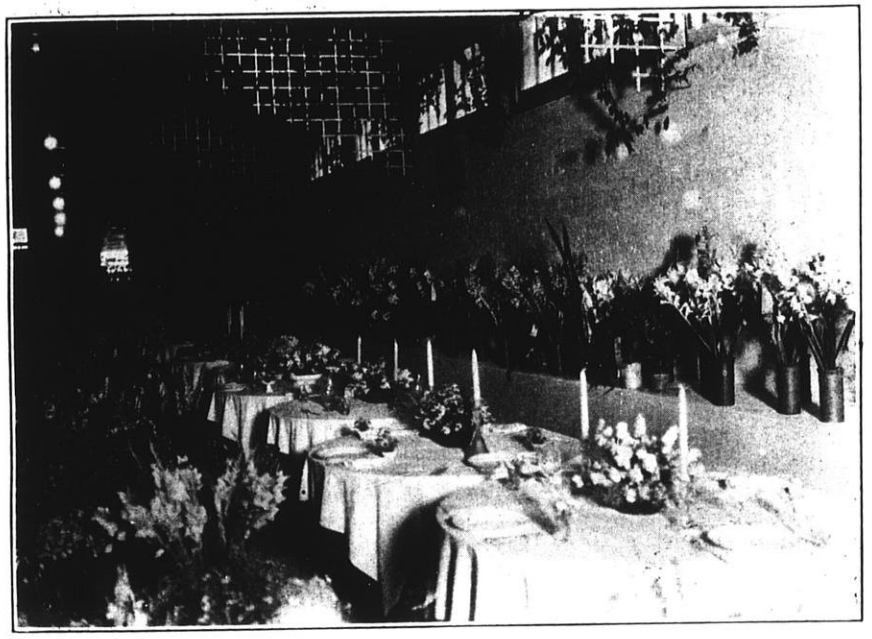
Devoted to better fruits, flowers and vegetables

OFFICERS
President
J. E. Leverich, Sparta
Vice-President
C. J. Telfer, Green Bay
Secretary
H. J. Rahmlow, Madison

Horticultural Exhibits at State Fair

Good Growing Season Brings Out Exhibits of High Quality

AS USUAL the Horticulture Building at the State Fair Park was jammed with people from morning until late at night. It is without question the most beautiful building on the fair grounds.



Amateur Flower exhibits and table decorations at State Fair.

Only one thing can be said about N. A. Rasmussen of Oshkosh, Superintendent of the Horticulture Department,—he has increased the number of horticultural exhibits until an extension to the rear of the present building is absolutely necessary.

The new coat of apple green paint with decorations of smilax, oak leaves and cedars made the interior more beautiful than it has ever been. A favorable growing season resulted in a more complete exhibit than ever before.

The Apple Exhibit

All available space in the Horticulture Building allotted to fruit was filled with apples of fine quality, with considerable overflow in the tent, at the rear.

In quality, size and color, the apples were better than last year. Someone counted them and found there were 22,902, a good many for the helpers to handle. Mrs. N. A. Rasmussen and H. J. Rahmlow were in charge of this department.

The four large exhibitors, showing in the 50 tray class and having a complete line of exhibits were: E. H. Stoeber, Madison; Ralph Irwin, Lancaster, Grant County; Kickapoo Development Company, Gays Mills; and Arno Meyer, Waldo, Sheboygan County. They won the 50 tray exhibits in the order named.

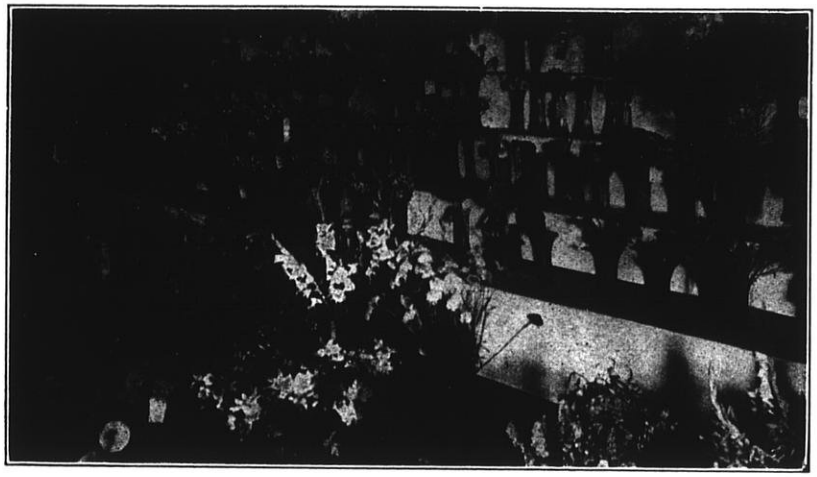
Other large exhibitors were: A. K. Bassett, Baraboo; A. C. Hauser, La Crosse; R. W. Hammersley, Madison; J. B. Sherman, Edgerton; A. D. Heise, Hales Corners.

There was also a good exhibit of plums, pears and grapes. John Rees of Twin Bluffs and G. M. Tehan of No. Milwaukee were the largest exhibitors of grapes.

Prof. J. G. Moore judged this department to the satisfaction of everyone.

The Vegetable Department

Mr. E. L. Roloff of Madison was again in charge of vege-



Another section of the flower show.

tables. He has been in this department for many years. In his opinion the quality of the exhibits were better than last year, but because the display is in the tent, it can not make a good showing.

Tomatoes were especially good in both size and color. There were several exhibits of red raspberries.

Mr. John Hauser of Bayfield again judged the exhibits very efficiently.

The largest exhibitors in the vegetable department were: F. B. Tindall, Waterford; G. M. Tehan, No. Milwaukee; R. R. Stevenson, Middleton; H. J. Rasmussen, Oshkosh; F. J. Lindlay, Fox Lake, Geo. Tesch, West Allis; Fred Schroeder, La Crosse; Russell Piper, Kenosha County; Mr. Hartman of West Allis and Haagen Bros. of North Milwaukee.

Nursery Exhibits

Four nurseries made a large display, the H. J. Sommers Co., West Allis; Hawkes Nursery, Wauwatosa; Eberhardt Sons, Cedarburg; and W. A. Toole, Baraboo. They won in the order named.

H. J. Sommers and Hawkes Nursery specialized in evergreens, Eberhardt Sons in Gladiolus and Dahlias and W. A. Toole in rock garden plants and perennials.

Fitchetts Dahlias, Janesville, Badger Dahlia farms, Hartford, F. Palmiter and Sons, Janesville, J. K. Rugowski Seed Company of Manitowoc, and Dr. A. J. Nelson of Milwaukee had splendid exhibits in commercial booths, specializing in gladiolus and dahlias.

Amateur Flower Exhibits

This exhibit was the largest it has ever been. There were over 1,000 vases of special flowers and 60 to 70 baskets and large bouquets.

Mrs. C. E. Strong of West Allis was in charge. She has built up this department as superintendent during the past seven years and has been connected with it as exhibitor and superintendent for twenty-five years.

Mr. James Livingstone of Milwaukee was the judge. In his opinion the showing is getting larger and better every year and can only be made perfect by more room, as the flowers and tables are so crowded it is almost impossible to judge them.

New exhibitors are coming in each year, there being fifteen new amateurs exhibiting. The flowers attracted a great deal of attention.

The dining table decorations were lovely. First prize was won by Mrs. Wm. Delaporte of Milwaukee. The flowers used were rose colored primulinus gladiolus, purple gladiolus, rose and lavender gezera, lavender scabiosa, funkia and physostegia. Mrs. Theo. Kurtz of Cedarburg won second place.

Baskets and table bouquets were splended. All types of flowers were most artistically arranged.

The old type of delphinium seems to be loosing favor. The types exhibited were the new hybrids with petals almost two inches across. The zinnias were very large, many of the new dahlia flowered hybrids being shown. Dahlias were gorgeous, one specimen having a spread of eleven inches.

The gladiolus show was large, the amateurs showing all the best new varieties. The largest exhibitors were: E. M. Goelzer of Oakwood; Mrs. Theo. Kurtz of Cedarburg; Mrs. Wm. Bruhn of West Allis; Mrs. Haasch of Wauwatosa; and Mrs. C. Harrington of West Allis.

Mrs. Strong stated it was fortunate no more exhibitors showed this year as the only place left to put them would have been the roof.

Commercial Florists

Mr. Nic Zweifel, Assistant Superintendent in charge of Professional florists exhibits said the exhibits in his department were of much higher quality than in former years. Lack of space prevents increase in quantity, which can only be overcome by an addition to the building. The table decorations were especially good. One of the judges stated he had never seen better in his life. The winning table displayed African Daisies, Montbretia, Light blue delphiniums, President Coolidge roses and Maiden hair fern with yellow candles.

Bridal bouquets were lovely and the baskets wonderful. The four largest prize winners were Holton and Hunkel Company, H. Locker and Sons, Aug. Kellner and Company and Chas. Menger, Inc., of Milwaukee.

(Continued on page 30)

The New Annuals

By J. H. BURDETTE
Vaughn Seed Stores, Chicago

A lecture before the Milwaukee County Horticultural Society

The growing of annuals appeals to many gardeners because of the quick results obtained. In this article are mentioned not only the best of the new varieties, but also desirable color combinations.

ANNUALS are coming into prominence because of the short time in which we can get results. It requires too many years of effort to fix results in biennials and perennials. The best plant improvements being done today are being done by commercial workers or men who are in the florists trade. Because they have to show commercial results, they are doing more of this work than anybody else.

California is growing the most of these annuals, because their climate and soil conditions are the best. There we can see from 25 to 50 acres planted to one variety. It is a wonderful sight to go there in June and see these annuals all in bloom. The best localities are the valleys along the seacost, Lompoc, Guadelupe, and any other valleys where the mean temperature stays around 60 degrees. They grow the kind of annuals that like the cool weather.

The first thing they must learn is to recognize variants. No one knows just why they vary. The individual workmen watch and report to the foreman and he to the owner, so that they may detect and save the best of them. About 25 per cent of the cross-fertilized seed from the variant will come true. These are saved and the rest destroyed, i. e.—rogued. These variants will vary in size, shape, color, and form. A good example of a meritorious variant is the Duplex Sweet Pea of the past year.

The standards of excellence are those of the florists. It generally takes four years of line breeding to fix the strain. The problem then is to accumulate a sufficient amount of seed, to accommodate the growing industry. In the last ten years many improvements have been

introduced. It has given us a new conception of outdoor gardening as well as greenhouse growing.

It has evolved the color scheme of gardening. We can go after the colors we want among annuals and live to see the results. Pleasing arrangements can be made in gardens just the same as they can in the house and its fittings, which is the job of the interior decorator. Color combinations are used to create interest and charm the beholder. If we place colors together that resemble each other, then we acquire harmony by analogy. If we use exactly opposite colors, then we get harmony by contrast.

The stocks, lupines and snapdragons of the florists well illustrate the marked advance in annual variations. By their use the florist is able to put up such wonderful arrangements nowadays. With snaps alone, one can now so plant them to get harmony by analogy, and get a beautiful garden, from midsummer to frost. The only drawback to annuals is that they do not bloom until summer is fairly well established. From then on, they are everblooming if we but keep the seed pods off the plants. Snaps have given us a range of salmons and bronzes that combine well. All the new snaps combine well, and that is because they are all tints and not shades. There is never a clash in tints but often we get them in shades.

While the asters have not been improved as much as some of the others, the noteworthy types recently produced are: the Anemone-flowered, the Sunshine type. The doubles are losing their popularity. In mums the size was most important. We now think that you can get more decorative quality in the single type of flower than you could in the double. Single asters are always best as border plants. Color contrasts may be well achieved in the Ball's Orange and yellow Calendulas, where we get excellent orange tones.

Cornflower Useful Annual

The annual cornflower is one of the most useful of flowers because it blooms the earliest. Two more blue annuals are Cynoglossum amabile, the Chinese Forget-me-not, and Gilia capitata, the hop clover. The Blue Thimble Flower is the nearest approach we get to true blue. The lavander Lace-flower is one of the most appreciated annuals, but it is very difficult to get it to germinate. Florists find it best to sow them in pans. When they are well grown they are very fine.

We have annual lupines now, which grow larger than snaps. The perennial lupines are diffi-

cult to grow in the garden. The giant strains produce better material than snaps.

The orange and brown toned marigolds may now be had in sizes that grow only half a foot tall, and those that grow five feet tall. Signata pumila is the smallest and Tall African is the tallest, growing 5 feet. These are the nearest to the double mums of the greenhouses. You can combine lavender, and Ageratum and the orange merigold together finely. Our most popular marigold now is the Josephine. This was discovered by my wife on account of its fine velvety texture. It is much lighter in color in dry weather, while it gets darker in wet weather.

Considerable has been done with the pansies. We are passing up the large ones and favoring the smaller Violas. Modern taste seems to have reverted. We get cycles like this in every walk of life. Crosses in these species are evidently original. There have been several species hybridized, where the improved plant is smaller, but it has been proven that the extra amount of flowers received, pay for this. The new violas are practically perennials as they seed themselves diligently. Viola cornuta is commercially raised from seed.

Petunias Have Been Improved

Petunias have been the object of many improvements. They have increased the size and given us new colors. The Giant types are new, as are the Dwarf and the Trailing types. The larger the flower, the fewer flowers on the plant. The wealth of bloom is the real merit of the petunia. Rosy Morn is the outstanding variety. With it, it is hardly ever necessary to pick off a withered blossom, and it lasts until frost. There have been some good improvements in the dwarf bedding types. The new kinds are the Rose of Heaven and the Bird or Balcony Blue. Oft-times we get a windowbox with an architectural feature in it, and this is the one to use. The colors in the window-box should harmonize with the color of the house. If you have a red house never use red, but use blue. Of course, these petunias should be obtained from your florist. Spring starts too late in Chicago and all points north to get them started.

Iris Needs Acid Soil

Flowers are all susceptible to soil conditions. Stocks want plenty of lime. Most everyone thinks that German iris wants lime, but it does better in a slightly acid soil.

The original orange colored zinnia has progressed ar. They are our largest double annuals and as they bloom through the season the finest blooms are the last. The new colors are in pinks and roses. The violet colors are the poorest. The Mexican zinnia gives us the most decorative summer cut flowers. They are singles.

All gardens must be more or less formal to match the usual house and lot in a city. It is difficult to make a naturalistic display in such a small space as is usually available. The formal garden is much better when small. You cannot grasp the large formal garden and must revert to the plans to understand it. The smaller the better, for you can easily see and understand such gardens. Purple and pink make a good color scheme. Some of the large formal gardens can only be appreciated from an airplane. So keep it small.

Mention WISCONSIN HORTICULTURE when writing our advertisers.

Choice Standard and Novelty Peonies
Prices reasonable, selected healthy roots. 250 varieties. Also iris and gladiolus.

JOHN GUMTZ
Grower-Importer
Merrill, Wisconsin

MILLION POUNDS OF CHERRIES DAILY IS RECORD OF DOOR COUNTY

STURGEON BAY, Wis.—With the heavy yield of Early Richmonds it is probable that the 1928 Door county cherry crop will go over the previous estimate of 15,000,000 pounds. By many it is believed that the present crop is the largest in the history of the county.

The season is expected to last about three more weeks and within the next few days the heaviest run of the season is expected. The Door County Fruit Growers Union is receiving an average of about 35,000 cases of fresh fruit per day which will equal nearly a million pounds.

According to H. W. Ullsperger, manager of the fruit Growers Union, there is a marked decrease in the demand for fresh cherries this year. In accounting for this fact, Mr. Ullsperger is of the opinion that the reason for this is that the women are devoting more time to outside activities and are buying more of the canned goods. The demand for canned goods is exceedingly good this year and at the present time the factory is packing about 200,000 cans a day.

During the past four years there has been a marked increase in the demand for cold packed cherries. The Door County Fruit Growers Union employ this method of canning cherries more extensively than anyone in the world and have created a good market in Eastern cities. With this method the fruit is packed in sugar and juice and instead of being cooked is frozen and kept in this state until ready for use. It has been found that the natural flavor of the fruit is preserved.

In 1924 the cold pack method was more of an experiment and but a few carloads were shipped out. This year it is estimated that over 75 carloads of cherries will be cold packed and marketed. The Reynolds Preserving company and the Martin Orchard company are also packing a large portion of their crops with this method.

This year, according to Mr. Ullsperger, the Door County Fruit Growers union are also cold packing a good deal of cherries in pint paraffin boxes which will be retailed by confectionaries as well as grocers. This has never been done before.

According to Mr. Ullsperger, the apple yield in Door county as well as Michigan does not look very favorable this year. A heavy crop of apples is reported, however, in other portions of the United States and especially so in the western part.—*Green Bay Gazette.*

Plants That Attract Birds

By HURON H. SMITH

The habits of birds are an interesting study. In this article, taken from Mr. Smith's talk over Radio Station TMJ, he not only tells of some unusual habits of our feathered friends but names a large list of the native plants which furnish them with food.

LITTLE enough is known about the feeding habits of birds. The few that appreciate our feathered neighbors are the people who tell us what plants seem to appeal especially to the birds. The scientific way of finding out what they do eat, is tough on the birds, if the scientist who is studying the problem kills the specimen in order to examine the crop. It reminds me of the biologist down in the Okefenoke Swamp in Georgia, who was studying the life history of the alligator. When he got through with his study, he knew the history of the alligator at every moment of its life, but he killed all the alligators in the swamp in finding it out.

Many dead birds are brought in to the taxidermy department of the museum, and if the specialists are not too busy, the contents of the crop are analyzed. In this way, some progress has been made. Herbert L. Stoddard, formerly the bird man at the Museum, but now a special investigator at Beachton, Georgia, for the U. S. Biological Survey, made a study of the horned owl pellets which told us some valuable and hitherto unknown facts. They proved that the horned owl was one of the farmer's best friends, because of the great number of field mice that they eat. Mr. Stoddard has been studying the habits of the quail or bob-white for three years, and an account of his findings was recently published in the National Geographic Magazine.

Birds Eat "Memory Seeds"

Where the food is not too much digested, the botanist can determine its plant source. For instance, we were surprised, a short time ago, to find the seeds of skunk cabbage in the crop of a grouse, brought in for mounting. These seeds are as sharp and painful to the human mouth as the root of the Indian Turnip or Jack-in-the-pulpit. If we were hunting a good common name for these seeds, we could call them "Memory Seeds", as we sometimes hear the name "Memory Root" applied to Indian Turnip. Surely one will long remember either, for the sharp calcium-oxylate crystals are exceedingly painful to the epithelial lining of the mouth. But this grouse, had evidently made a fine, full meal on the skunk cabbage seeds. We commented upon his "cast-iron stomach", and marveled somewhat.

Birds Eat "Poisonous" Plants

But we must never judge birds, animals or insects by our likes and dislikes. Many birds greatly relish the fruits of poison ivy and poison sumac, which are just as poisonous in the winter-time to human beings as the fresh leaves are upon a hot summer's day. This is not a case of "one man's meat being another man's poison", but rather that poison to men, may be harmless to birds. We know that certain birds and insects eat the deadliest mushrooms with impunity. Food habits are hard to explain. Even food likes and dislikes or prejudices among people are difficult to explain. There is a wide difference in tastes, as the good lady said when she "kissed the cow".

We think we know many plants that attract birds, but the probability is that we know less than one-hundredth part of the number of plants that attract them. Some of the birds are surely cunning rascals when it comes to utilizing the plant food they find. It must be called instinct, for we are not ready to ascribe reason to the lower animals. Yet, their hoarding of nut foods in hollow trees and the attics of houses is done in a clever manner. They are just as cunning about it as the squirrels.

Woodpecker Has "Worm Ranch"

Some experiences I have had make me think birds are more capable than squirrels. Some years ago, on San Jacinto mountain-side, in Southern California, I noted a big bull pine, whose bark was stuck full of acorns. A round hole had been pecked into the bark by a sapsucker. The acorn was wedged into the hole so tightly that it was extracted with great difficulty with a jack-knife. The large or soft end of the acorn protruded. Some sort of a beetle visited each acorn and deposited an egg just under the surface. This egg developed into a fat larva, which became fat and oily by devouring the meat of the acorn. Mr. Sapsucker came back for his harvest about this time, in the winter when other food was scarce; pecked open the soft end of the acorn and found a juicy breakfast within. I had heard of nearly every kind of a ranch in California, but this was the first time I ever heard of a "worm-ranch".

When the cherries are ripe, there's no question about the attraction of the birds. Everybody knows who first discovers that the cherries are ripe. But

how about some of the other plant foods? There is a very good example of a selection of pants that does attract birds down at Lake Geneva, Wisconsin. Wychwood, founded in 1901 by Mr. and Mrs. Chas. L. Hutchinson, of Chicago, as a sanctuary for native plants and birds of Wisconsin, was planted with the specific attempt to attract birds. They succeeded beyond their greatest expectations. In the tangled shrubbery by their great chalet, more birds from the migrant hordes remain than stop at any other place we have found in Wisconsin.

Plants that Attract Birds

Of course you want to know exactly what these enticing trees and shrubs are. So we will tell you in as systematic a manner as we can. In the Sumac family, two shrubs are used there, the Fragrant Sumac and the cut-leaved Staghorn Sumac. In the Ginseng family, Acanthopanax pentaphyllum is used. The buds and seeds of the white birch seem to offer some attraction to the birds. In the Barberry family, the Japanese Barberry becomes attractive to birds when other food is scarce. Pachysandra in the Boxwood family produces a seed that looks good to birds, while the dense ground foliage looks good to us white folks.

The honeysuckle family furnishes the largest quota of plants most attractive to birds. Many species of honeysuckle are grown there. Also many species of Viburnums, like: Witherod, arrowwood, wayfaring tree, blackhaw, nannyberry, and Siebold's Viburnum. The Staff-tree family is represented at Wychwood by wahoo, wintercreeper and the Winged Euonymus.

The Dogwood family is represented by the Cornellian Cherry (Cornus mas), with its fruits like miniature pickles,—in fact, —it is one of the 57 varieties. Any dogwood at all is favored by the birds,—kinnickinnik, red osier, panicled dogwood, alternate-leaved dogwood or any of the rest. In the Oleaster family, the Russian Olive and the Sea Buckthorn are planted. In the bean family, they grow the Siberian Pea-tree. In the Mallow Family, they grow the muskmallow and the Globe Mallow. In the Olive family, we find they have the various species of the Chinese Golden Bell (which is blooming so profusely in Milwaukee right now)—and the ordinary California privet.

The rose family furnishes a host of species such as the Yama Cherry, the Flowering plum, varieties of crabapple galore, and many roses such as the Cathay Rose, Eca Rose, the Golden Rose of China, Japanese Rose, Prairie Rose, and Scotch Rose; blackberries and thimble berries, and the Ural False-Spiraea. The Saxifrage family is represented by the Slender Golden Currant and the Golden Currant. The Potato family furnishes matrimony vine and the strawberry ground cherry.

This is a proven list but by no means all that you could grow. A few of our wild flowers might be included, such as plantain, black mustard, peppergrass (and what canary has never enjoyed this?), squirrel corn, the water docks, Indian hemp, wild rice, the false buckwheats, common elder, Partridge berry, trailing bean, jewelweed, millet, rye grass and nodding wild rye, wild oats, and all of the sunflowers. Among the other trees and shrubs that we might mention are the common juniper, the low juniper and the red cedar.

Birds will always be found around cottonwood or poplar trees, picking the buds, or gathering the downy catkins or the fluffy seeds to line their nests. Among the native plants of the rose family, we must not forget the service—or Juneberry, the hawthorns, the wild pin, red or bird cherry, the choke cherry and the wild black cherry. We have but two representatives of the holly family in Wisconsin, the winterberry and the mountain holly,—both of which attract birds. We have plenty of shrubby gooseberries and currants native to the state that attract birds, and plenty of the blackberries and raspberries. Buffalo berries may be not so well known to my hearers as it was to our aboriginal inhabitants, but the birds like it as well as the Indian did, and it grows all along the Lake Michigan shore in Milwaukee and other counties. Among the heathers, the blueberries and bearberries make a hit with birds. We have numerous native members of the honeysuckle family not before mentioned, which are very attractive to birds, and one of the most valuable is the high-bush cranberry.

Yes,—we have the goods in Wisconsin, and therefore we also have the birds,—we have more feathered tourists in Wisconsin than gasoline ones, and like grape nuts,—there's a reason. Let's try to magnify that reason.

"Have any of you children ever seen an orchid?" asked the teacher.

One youngster raised her hand. "I have," she said, "growing right around here."

"Oh, no," said the teacher. "You're wrong. Orchids don't grow in Wisconsin."

"Yes, they do," insisted the girl. "We have some very lovely cypripedium hirsutum, and the habenaria dilatata are pretty. But after all, I think my favorite is habenaria leucopheae."

The bright child was La Vaughn Smith, daughter of Huron F. Smith, curator of botany at the public museum. Mr. Smith had made a point of teaching her the scientific and Latin names of Wisconsin plants."

—Milwaukee Journal.

If you are attempting some grafting with the help of Farmers Bulletin No. 157 do not attempt the impossible. Plants must be near relatives in order to be grafted successfully.

Society Meets At La Crosse

Program Brings Out Important Facts for Horticulturists

AN EXCELLENT program and a very interesting tour featured the annual summer meeting of the State Horticultural Society at La Crosse on August the 11th.

The Executive Committee and Board of Managers met on the afternoon of August the 10th for a business session. Probably the most important piece of business transacted was the appointment of a special committee to work during the coming year on a booklet recommending the varieties of fruits, shrubs, flowers and vegetables for Wisconsin. It is planned to make this booklet a very thorough and detailed report covering the best varieties to be grown in different sections of the state, based upon climatic conditions.

Unfortunately, due to sickness and press of other duties, a number of the Executive Committee members found it impossible to attend the meeting. Those present were: Vice-president, Mr. C. J. Telfer, Green Bay who presided at the meeting; Mr. A. K. Bassett, Baraboo; Mr. H. C. Christensen, Oshkosh; Mr. M. S. Kellogg, Janesville; Mr. W. E. Spreiter, La Crosse; and Mr. J. F. Swartz, Kenosha.

Officers of Society at La Crosse summer meeting. Left to right: A. K. Bassett, J. F. Swartz, H. J. Rahmlow, W. E. Spreiter, M. S. Kellogg, C. J. Telfer.

Annual Convention at Milwaukee December 5-6-7

It was unanimously voted to accept the invitation of the Milwaukee Chamber of Commerce and hold the next annual convention in the Milwaukee Public Museum December 5-6-7. It was decided to put on a sectional program covering fruits, flowers and vegetables at this meeting and offer premiums for an exhibit.

The Secretary read a report of the receipts and expenditures of the Society for the past fiscal year showing a substantial carry-over of funds placing the Society on a sound financial condition.

Convention Program Very Good

The program opened at 9:30 A. M. on Saturday in the Chamber of Commerce Rooms. Forty members were in attendance. This small attendance was probably due to the fact that La Crosse County farmers were busy with thrashing and also because Ringling Bros. Circus was in the city the day previous.

The morning session was opened by an address of welcome by Mayor J. J. Verchoca who spoke of the importance of horticulture to the people of La Crosse and to the state. A response was made by Mr. M. S. Kellogg of Janesville who told of the history of the Society which was founded in 1865.

He stated that the members of the Horticultural Society had heard a great deal of La Crosse and its fruits, flowers and vegetables, and that they came there to learn and to make horticulture better. He urged everyone to attend the State Fair to see the Horticultural products that Wisconsin can grow.

Strawberry Improvement

Mr. N. A. Rasmussen of Oshkosh talked on the growing of strawberries and also urged the fruit men to exhibit at the State Fair. He stated that a few years ago there were very few apples in La Crosse County fit to be shown at the Fair because of scab and worm blemishes but today La Crosse County, due to its County Agent and Horticultural organizations, exhibits wonderful fruit. In his opinion La Crosse needs a vegetable growers association. He stated he had not been able to find a good home grown tomato in the city. The value of meetings, he said, was to learn from others with experience.

Strawberries, said Mr. Rasmussen, can be improved by selecting the best plants in the field and propagating them separately, eliminating the weaker ones. The strawberry bed should not be saved too long because of disease.

There was considerable interesting discussion following this talk. Mr. H. H. Harris of

Warrens had brought a number of strawberry plants to the meeting to demonstrate the vigor of the vines of the Oshkosh variety compared to the Dunlap.

Growing Perennials

Mr. John Hauser of Bayfield talked on the growing of perennials in which he is well versed. He emphasized that perennials need a well drained location to prevent winter killing. Covering is essential in most localities.

Snow makes a good covering but ice is disastrous. Mulching between the row is better than covering the row according to Mr. Hauser. Corn stalks, hay and peat moss make excellent mulches but leaves will smother. Heaving is prevented by having sand or humus in the soil. The best location is where the coolest winds do not strike. To develop a good root system seed or plants should be put in early.

Bulbs should be covered heavily as they do not smother which is not true with shallow root plants such as hollyhocks. If plants are in a poorly drained location they should be taken up in the fall and healed in in a well drained soil or in dry sand.

This was followed by a discussion as to the value of muck or peat as a mulch or covering. This substance was highly recommended by the growers for both purposes and the question was raised why this material is shipped in from Europe instead of being produced in this country where peat can be found in abundance.

Mr. H. C. Christenson of Oshkosh spoke on the growing of vegetables. He mentioned that there was a large increase in the use of vegetables in late years due to the discovery of vitamines and the value of vegetables to health.

Growing Asparagus

Asparagus, he said, should be planted two or three inches below the surface. If white shoots are wanted, dirt can be thrown over the plants. They should be cut only until July 1st.

For fertilizer he recommended manure which is applied fresh as soon as cutting stalks, being decomposed by the following spring and is then worked into the soil.

Professor R. E. Vaughan of the Plant Pathology Department told of the work being done at the University on the control of aster wilt and yellows. A large plot has been screened with cloth in which asters are being grown.

It has been found that the yellows disease which is a virous disease similar to the mosaic types, will not spread if grown where leaf-hopper are not present. Practically no diseased plants are found in the plot under cover while there is considerable disease just outside in the open.

Considerable progress is being made in developing strains of asters resistant to the wilt, which is a fungus disease living over in the soil, though it will be some years before such seed can be sold commercially. Professor Vaughan also mentioned that apples should be sprayed in August to control late scab which will otherwise develop after the apples are harvested.

The Secretary of the Society spoke on the work done during the past year mentioning especially the different meetings held during the summer. It was his opinion that because this is an age of specialization, meetings on special topics are of most interest and best attended. This was proven by the large attendance at the Sparta Strawberry Day and the Lake Geneva Garden Club Convention, also the good attendance of the fruit growers tour in Michigan. The La Crosse meeting was a general meeting which probably accounted in part for the small attendance.

The Farm Home Grounds Contest

The tour started at 1:30 in the afternoon. The first stop being the Salzer Experimental plots where different varieties of flowers and vegetables, including sweet corn were inspected. The Salzer Company has a large experimental farm and considerable work was in progress.

The greenhouses of the La Crosse Floral Company were next inspected. This company has several large houses 50 feet long devoted to growing chrysanthemums, roses and carnations for the wholesale trade. All appeared in excellent condition.

The tour then started eastward on highway 16 between La Crosse and West Salem where the farms entered in the Farm Home Grounds Contest were inspected. Professor Franz Aust of the Landscape Gardening Department of the College of Agriculture gave a very interesting discussion at the different stops on the methods used in conducting the contest, and the results achieved. The work is being done under the supervision of Professor Aust and Professor J. G. Moore with the cooperation of County Agent Spreiter and the La Crosse Rural Planning Committee. Two sets of prizes consisting of $25.00, $15.00 and $10.00 are given for the farm grounds showing the greatest amount of improvement and the best landscape effect.

It was a pleasure indeed to see the interest and the good results obtained by the farmers entered in this contest. It was very noticeable that those in the contest had better looking home grounds than many seen along the highway who had not entered. As a matter of fact we have seen but few highways in the state where the landscaping can compare with that seen on highway 16 from La Crosse and West Salem.

The chairman of the La Crosse County Rural Planning committee spoke briefly at one of the stops on the work of his committee. In addition to fos-

(Continued on page 27)

The State Potato Tour

Certified fields in Northern Wisconsin visited. Production problems discussed

Officers of State Potato Growers Association on tour. Left to right: Sec. J. G. Milward, Vice Pres. Jas. Hanson, Pres. Wm. Dama.
Photo by Jakoubek, Phillips

THE opinion of everyone attending the State Potato Tour this year was that Wisconsin is still among the leaders in the production of certified seed potatoes. The quality and yield of the fields seen in northern Wisconsin was remarkable. This locality is surely well adapted to the growing of thrifty and healthy seed stock.

Potatoes as a cash crop for the dairy farmer was discussed a good deal at many of the stops. In Barron County and in other extensive dairy sections many dairy farmers produce several acres of potatoes annually as a side line. This practice, enabling them to grow potatoes in a good crop rotation, is the reason why they produce such good quality seed, though the cool climate and new soils are a big factor.

The tour opened on August 13th at the State Experiment Station at Spooner. About fifty potato growers were present, also a number of representatives of potatoes machinery and potato buying concerns. The first forenoon was devoted entirely to inspection of the different experimental plots on the Spooner station.

Professor E. J. Delwiche and Professor J. G. Milward were on hand to tell the growers about the different experiments.

Professor Delwiche called attention to the importance of alfalfa in the farm rotation which includes potatoes as a cash crop. He was asked the question whether lime applied on alfalfa would cause the potatoes to be scabby and replied that if the field was left in alfalfa about three years the scab producing effect of the lime would be gone. There was a splendid field of alfalfa on the Spooner station, showing that sandy soils are well adapted to growing this crop.

Tuber index plot of Conradi Bros., Phillips, Wis.
After the Triumphs having the mosaic disease have been removed at the Experiment Station greenhouse, the healthy tubers are planted in isolated plots for increase.
Conradi Bros. have developed a very healthy and high yielding strain of triumphs. At left is John Conradi, Wisconsin champion seed potato grower.

Photo by Jakoubek.

There was considerable interest in the Triumph plot. This spring practically all the Triumph growers had sent in a sample of their seed to be planted as a trial on the Spooner plot. Most of them were practically free from mosaic showing that Wisconsin seed is uniformly of a high quality.

During the past few years Wisconsin growers have had considerable competition from western growers on the certified Triumph market. The argument used was that they had a lower percentage of mosaic in the west, but the work being done in Wisconsin on tuber indexing, followed up by "increase plots," produces seed that is practically free from this disease.

Wisconsin triumphs now compare favorably with seed grown anywhere in the United States as shown by comparative tests conducted this past year in the state of Texas.

Fertilizers Being Used Extensively

The amount of commercial fertilizer being used in all the different sections this year was noticeable. The principle brand used on sandy soil was the 5-8-7 mixture containing 5% of nitrogen, which gives a good vine growth on the lighter type of soil. For heavier soils little less nitrogen is used.

Most growers are using from 400 to 700 lbs. per acre, the average being probably 500 lbs. In almost every county comparative fertilizer tests were being conducted. All showed an increased yield over the unfertilized plot.

On the afternoon of August 13th, the tour left Spooner for the Seeley section where several large fields of Green Mountains, Kings and Triumphs belonging to the Albert Miller Company of Chicago were visited. The crop was in splendid condition and promised a large yield.

Potato Show Meeting at Rice Lake

In the evening of August 13th, a meeting was held at Rice Lake under the auspices of the Potato show committee at which plans for the event were discussed. Rice Lake is getting ready for one of the largest exhibits ever held in the history of Wisconsin potato shows. This year the Northern State Grain Show will be held in connection with it.

On Tuesday August 14th Rural New Yorker fields around Rice Lake and Barron were visited. Barron County is probably the leading county in the production of certified and table stock Rural New Yorkers. All the fields were in splendid condition and will yield heavily.

The fields of Jim Hanson and Son, Hans Anderson, Gus Kringle, Carl Haselberg and Albert Johnson were visited.

Banker and farmer inspect Certified Triumph field.

Mr. Tony Royter of Phillips was proud of his spuds. A number of business men besides Mr. Geo. Chamberlain, shown here, inspected his field.

Northern farmers have found certified potatoes profitable, and business men are interested in their success.

Photo by Jakoubek, Phillips.

Large Crowd Welcomes Visitors to Price County

On Tuesday evening the Phillips Commercial Club entertained with a dinner and an excellent program at the Price County fair grounds. On Wednesday some fine fields of Triumphs near Phillips were visited. The work of Conradi Brothers in producing a high yielding low mosaic strain of Triumphs on their farm has enabled Price County to lead the state in the number of applications for inspection, growers being able to get good seed locally. 97 groers applied for inspection this year.

The noonday luncheon and picnic at Ogema in southern Price County was the largest and most enthusiastic meeting of the tour. Between four and five hundred people attended the dinner served free of charge to the visitors by the growers and business men of southern Price County. An interesting program was presented on the farm of Gus Donaldson on Stone Lake. The Price County Committee was County Agent Jacobsen, Carl Mess, Arvid Bloomberg.

Leaving Ogema the tour stopped on Wednesday evening for a program at Tomahawk Lake where certified Kings or Spaulding Rose and Green Mountains were inspected. The crop was in fine condition. The Kings are shipped to Florida and The Green Mountains to Long Island, N. Y.

Oneida County put on a real program and some fine fields of certified Green Mountains, Triumphs and Irish Cobblers were inspected.

At Harshaw an interesting discussion occurred on the grading and marketing of potatoes.

Marketing and Grading Discussed

Commissioner of Markets, Jas. Vint, and A. W. Pommerening who is in charge of grading for the Department, spoke at not only Harshaw but also at Eagle River and Antigo on the potato marketing problem.

Several parties on the tour had recommended that Wisconsin adopt a 2 inch minimum grade this year because of the large crop in prospect, estimated at 459 million bushels for the United States.

It was held at the meeting however, that Wisconsin alone could do nothing to reduce the total crop to be marketed by more careful grading as this must be done over the entire United States if it is to be effective.

Mr. Pommerening stated that if a better pack than U. S. No. 1, which calls for a 1⅞" minimum, is desired, the U. S. Fancy, requiring a 2" minimum can be used.

Mr. Vint emphasized that growers and shippers should grade carefully and not flood the market with inferior stock thereby reducing the price. Wisconsin has the opportunity of putting out a superior quality pack this year—one containing not over 2% of defective stock. Such a pack will create a reputation for Wisconsin potatoes and net the highest prices.

The Department is now planning a series of meetings in the commercial potato sections for the month of September to acquaint growers and shippers with proper grading methods.

On Friday, August 17th, the tour covered the Eagle River section. This section is noted for its large fields of certified Triumphs, several of which were grown from western seed stock. The fields were in good condition with satisfactorily low mosaic count.

Saturday, August the 18th, was spent in the Antigo section which is noted for its certified and table stock Irish Cobblers. The crop is in excellent condition this year and harvesting table stock already begun. This stock brings a premium on all big markets. In this section the Triumph tuber index plots on the Smith farm near Kent were visited. Here potatoes taken from the University greenhouse where the tuber index work is conducted, has been planted.

All tubers effected with mosaic disease are removed and only the healthy seed sent back to the grower. Mr. Smith has a field of such seed which is practically free from disease.

It was brought out very well that Wisconsin can grow its own seed stock.

Many out of State Men Present

Representatives from outside of Wisconsin attended the tour. Among these were Dr. P. F. Trowbridge, Director of the N. D. Experiment Station at Fargo; Dr. C. P. Close, Extension Horticulturist from Washington, D. C.; Mr. W. J. Kriss of the Union Pacific of Omaha, H. A. Nunn of the Dupont Corporation, Delaware; A. E. Anderson representing alfalfa, Miles City, Montana; M. Hull of the Experiment Station, Baton Rouge, La.; E. A. Carncross, County Agent, Wheaton, Illinois; Mr. Barrett, County Agent, Cook County, Illinois; also representatives of of the McKenzie Mfg. Company, Darling Fertilizer Co.; Swift Fertilizer Co., The American Agricultural Chemical Company, The Oliver Chilled Plow Works, Niagara Sprayer Company, Green Bay and Western Railroads, Chicago & Northwestern Railroads, Leonard, Crosset & Riley Company, A. M. Penny Company, Armour Fertilizer Works, Grasselli Chemical Company and representatives of the State Experiment Station and County Agents.

Altogether it was a very fine tour and Professor J. G. Milward, Secretary of the State Potato Growers Association is to be congratulated on his work.

STORING CANNAS

Cannas should be lifted from their summer quarters after being cut down by the first frosts. Before this occurs they should be gone over and labeled correctly, noting the color, size and comparative value of seedlings or new varieties. Use hanging labels, tying them on firmly as near the ground as possible. Cut off the flowering stem when lifting your Cannas, about six inches from the ground. If there be greenhouse accommodation, a place under the benches, where they will not get much drip, will answer. If such space is not available, they should be closely packed together in boxes, covered with dry sand and stored away where frost will not reach them.

Marketing Requirements

By JAMES H. VINT
Commissioner of Markets

IN ORDER that the farmer may get the full benefit of his markets there must be orderly distribution. The fundamental condition of orderly marketing is a rigid adherence to standard grades. Because of wide variations in the efficiency of individual growers, differences in methods of culture, in soil and climate there can be no orderly marketing without standardization of products. Numerous cases of failure can be traced to a lack of appreciation of the relation between standardization and good marketing practices.

One of the Chief advantages of standardization is that it provides a common language between buyer and seller. A common language is indispensable in telegraphic sales; it facilitates settlement of claims and permits an intelligent comparison of market prices. It is, moreover, of a basic importance in dealing in futures, because it eliminates endless disputes in the event of a material drop or rise in the market.

Another important advantage of standardization is that it makes possible the sorting of products which results in premiums on good quality products and in a general increase in prices. Besides reducing selling margins and eliminating waste in the transportation of low quality and unconsumable products, sorting plays an important part in bringing about effective distribution.

The purpose of effective distribution is to find a market which will give the grower the largest return for his product. Four factors are involved in effective distribution, namely: reaching the widest possible territory, extending the market season so as to allow the longest possible period of time to dispose of the crop, conforming to trade preferences for the purpose of meeting the broadest range of consumer demand, and, finally, reducing distributors' margins to a minimum.

In order to reach the widest possible territory it is necessary to pay strict attention to the stage of maturity and to various defects which may result in deterioration. This can be attained through the application of standard grades. Defective products may sometimes be marketed nearby for by-products purposes, but shipping them to distant markets would restrict or even cancel their sale.

The use of storage and warehouse facilities is indispensable to the extension of the marketing season. To avoid excessive deterioration, which results in shrinkage and expensive rehandling, the commodity must be well graded. If a longer period is allowed for distribution shippers can sell the crops of competing areas to best advantage, thus stabilizing the market and avoiding alternate gluts and famines. As a result, extreme fluctuations of prices are less frequent and the product is more generally available.

Consumer demand is the all important factor in marketing. It is, therefore, necessary to give recognition to trade preferences. Products of indiscriminate size and quality seldom find a good market.

Standardization of products involves inspection and the issuance of inspection certificates. The chief uses of these certificates are:

(1) They serve as a basis for f. o. b. sales to buyers in distant markets.

(2) As a basis for sales in connection with the f. o. b. telegraphic auction.

(3) As a basis for claims of losses resulting from failure of transportation companies to provide proper service.

(4) As a basis for settling disputes between buyers and sellers on transactions involving delivery on contracts. The inspection service is, moreover, an important educational agency.

A rigid adherence to standard grades and an effective inspection service are particularly beneficial in years of high production. As the following table shows, price decreases occur in years of high production and increases in years of low production. Sorting products according to definite grades will contribute a great deal towards obtaining premiums on high quality products and check the decline in the average price in years of high production.

The production of potatoes in 1928 in the United States is estimated at 459,737,000 bushels as compared with 402,149,000 bushels in 1927; production in Wisconsin in 1928 is estimated at over 33,000,000 bushels as compared with less than 24,000,000 bushels in 1927. Now, therefore, is the time when all those interested in good markets should dispose of their potatoes in accordance with the established standards thereby obtaining the premiums that are the result of an efficient and orderly marketing of farm products.

Potatoes

	U. S. Acreage	Production	Ave. bu. Pr. at farm
1921	3,941,000	361,659,000	$1.10
1922	4,307,000	453,396,000	.58
1923	3,816,000	416,105,000	.78
1924	3,327,000	421,585,000	.62
1925	3,092,000	323,465,000	1.86
1926	3,122,000	354,328,000	1.41
1927	3,505,000	402,149,000	.96
1928		*459,737,000	

*estimate

Mention WISCONSIN HORTICULTURE when writing our advertisers.

Minnesota Horticultural Society Meets in Duluth

THE editor was fortunate in being able to attend the annual summer meeting of the Minnesota State Horticultural Society on August 7th and 8th.

On the morning of August the 7th, a good sized delegation of Minnesota horticulturists met at the "Summer White House" in Superior to have their picture taken with President Coolidge.

The president was presented with a basket of very fine Latham raspberries, grown by a grower in Duluth. Mr. Coolidge expressed himself very much pleased with the quality of these berries of Minnesota origination.

A tour was then made to Virginia, Minnesota, about 75 miles northwest of Duluth where an "open pit" mine, probably the largest in the world, was inspected. Returning, stops were made at a large potato farm and several estates near Duluth.

The evening banquet in the Chamber of Commerce rooms was followed by an interesting program.

Professor Alderman, head of the Department of Horticulture at the University of Minnesota, was the leading speaker of the evening. He told of the work of the Department in the breeding of new varieties of fruits and vegetables. A great deal of work has been done in Minnesota in improving and acclimating the fruits and vegetables.

Other speakers were Mr. Ray Speer, President of the Society; the presidents of a number of Minnesota organizations such as the Minnesota Nurserymens Association, Peony Society, Florists' Association, Mr. Thompson, head of the Experiment Station at Duluth and the Secretary of the Wisconsin State Horticultural Society.

On Wednesday the tour visited a number of beautiful estates near Duluth and also the Experiment Station and Fruit Breeding Farm for northern Minnesota just out of Duluth. Here a large orchard was inspected and the trees found to be doing well. The Hibernal is the most hardy variety for this section though the Duchess, Wealthy and several varieties of crabs are doing well.

New varieties of potatoes are being originated at this station and several give much promise for increased yield and good quality.

It was a surprise to many from more southern localities to find such wonderful home grounds, flowers and shrubbery in and near Duluth. Flowers such as Delphiniums and peonies do exceptionally well in this cool northern climate. Being near Lake Superior, shrubs do not winter kill and many of the leading varieties were seen at their best.

The editor invited the Minnesota Society to tour through Wisconsin on their way home, also to meet with us some time next summer. President Speer later expressed himself as very much in favor of a joint meeting of Minnesota and Wisconsin fruit growers to be held in Door County some time in July, 1929. This would be a very interesting meeting.

APPLE CANDY

2 cups unsweetened apple pulp, 2 cups sugar, 1 cup ground nuts, 2 tablespoons gelatine, 8 tablespoons cold water, 1 tablespoon lemon juice.

The apples should be cooked in as small a quantity of water as possible without burning, until they are tender, then put thru a fine sieve, add the sugar and cook until very thick — about forty minutes. Have the gelatine soaking in cold water; when the apple mixture is real thick add the gelatine and stir well. Add the lemon juice and nuts, stirring constantly until the mixture becomes slightly cool. Rinse a pan in cold water, drain, pour the candy in and smooth.

When the candy is firm and cool, cut in squares, roll in powdered sugar. This candy keeps best in a tin box lined with oiled paper and paper between the layers.

Member
Kenosha Florists and Nurserymen's Association
Assoc. Member
Illinois Nurserymen's Association

The Swartz Nurseries

GROWERS OF

Shade, Ornamental & Evergreen Trees

Shrubs, Vines and Roses

Park, Cemetery, and Golf Ground Planting

Landscape Architects

KENOSHA, WISCONSIN

Phone 2F4

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor

Secretary W.S.H.S., Madison, Wis.

Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. B. Goff.....Sturgeon Bay
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
George M. Moseman.....Menomonie
W. E. Spreiter.....La Crosse
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

CONVENTION DATES SET FOR DECEMBER 5-6-7 AT MILWAUKEE

AT THE meeting of the Executive Committee and Board of Managers at La-Crosse on August 10th, it was voted to hold the annual convention and exhibition of the Society in the Public Museum, Milwaukee, on Dec. 5, 6, 7.

An invitation had been received from the Milwaukee Chamber of Commerce and Mr. Huron Smith, Curator of Botany of the Milwaukee Public Museum which was unanimously accepted.

An effort will be made to have an exhibition of high quality at this convention and the program will be divided into two or three sections. There will be a special program for fruit growers and another for garden club members. Probably a third will be held for strawberry and raspberry growers and also have some special sessions for vegetable growers.

Every effort will be made to put on a program that members can afford to travel from distant parts of the state to attend. Be sure and look over the premium list for the fruit exhibit and select fruit early.

PREMIUM LIST

ANNUAL CONVENTION WISCONSIN STATE HORTICULTURAL SOCIETY

Milwaukee Public Museum

December 5-6-7

COUNTY FRUIT EXHIBIT

C. L. KUEHNER, Sup't

Open to any County in Wisconsin. Opportunity will be given for display of signs giving name of County and growers with each County exhibit, which must be a separate display.

A County display will consist of 10 trays of apples from at least **5 different growers** showing **not more than 5 varieties.**

Six trays in each exhibit must be of the following varieties; McIntosh, Wealthy, Northwestern Greening, Snow.

Best County Exhibit—Silver Trophy and $25.00.
2nd Best County Exhibit—Special Trophy and $20.00.
3rd Best County Exhibit—Special Trophy and $15.00.
4th Best County Exhibit—Special Trophy and $15.00.
5th Best County Exhibit—Special Trophy and $15.00.
Each additional County Exhibit—$10.00.

SINGLE TRAY EXHIBITS

	1st	2nd	3rd	4th
1. McIntosh	Silver Trophy	$3.00	$2.00	$1.00
2. Wealthy	Silver Trophy	3.00	2.00	1.00
3. Delicious	$4.00	3.00	2.00	1.00
4. Northwestern	4.00	3.00	2.00	1.00
5. Fameuse (Snow)	4.00	3.00	2.00	1.00
6. Windsor	4.00	3.00	2.00	1.00
7. Wolf River	4.00	3.00	2.00	1.00
8. Salome	4.00	3.00	2.00	1.00
9. Westfield	4.00	3.00	2.00	1.00
10. Tolman Sweet	4.00	3.00	2.00	1.00
11. McMahon	4.00	3.00	2.00	1.00

Best display of three trays each of any three varieties.

1st	2nd	3rd
$10.00	$8.00	5.00

PLATES

	1st	2nd	3rd
1. Pewaukee	$1.00	$0.75	$0.50
2. Baldwin	1.00	.75	.50
3. Plum Cider	1.00	.75	.50

4. Gano	1.00	.75	.50
5. St. Lawrence	1.00	.75	.50
6. Dudley	1.00	.75	.50
7. Scotts Winter	1.00	.75	.50
8. Grimes Golden	1.00	.75	.50
9. 20 Ounce	1.00	.75	.50
10. Golden Delicious	1.00	.75	.50
11. Wagner	1.00	.75	.50
12. Jonathan	1.00	.75	.50
13. McMahon	1.00	.75	.50
14. Wealthy	1.00	.75	.50
15. McIntosh	1.00	.75	.50
16. Delicious	1.00	.75	.50
17. Northwestern Greening	1.00	.75	.50
18. Fameuse	1.00	.75	.50
19. Windsor	1.00	.75	.50
20. Wolf River	1.00	.75	.50
21. Salome	1.00	.75	.50
22. Westfield	1.00	.75	.50
23. Tolman Sweet	1.00	.75	.50
24. Golden Russet	1.00	.75	.50
25. Willow Twig	1.00	.75	.50

Best display of five plates each of five commercial varieties.

1st	2nd	3rd	4th	5th
$10.00	$8.00	$6.00	$4.00	$2.00

CULINARY VEGETABLES

	1st	2nd	3rd
1. Best collection, not less than ten entries	Silver Trophy		
2. 6 Blood Turnip Beets	$1.00	$0.75	$0.50
3. 3 Rutabagas	1.00	.75	.50
4. 6 Chantenay Carrots	1.00	.75	.50
5. 3 Winter Cabbages	1.00	.75	.50
6. 3 Red Cabbages	1.00	.75	.50
7. 6 Red Onions	1.00	.75	.50
8. 6 Yellow Danvers Onions	1.00	.75	.50
9. 6 White Onions	1.00	.75	.50
10. Largest Onion	1.00	.75	.50
11. 6 Parsnips	1.00	.75	.50
12. 1 Hubbard Squash	1.00	.75	.50
13. 3 Table Queen Squash	1.00	.75	.50
14. 3 Heads Celery	1.00	.75	.50
15. 3 Chinese Cabbage	1.00	.75	.50
16. 6 Salsify	1.00	.75	.50

GREENHOUSE GROWN

17. 3 Bunches Radishes	1.00	.75	.50
18. 5 Tomatoes	1.00	.75	.50
19. 3 Cucumbers	1.00	.75	.50
20. 3 Lettuce	1.00	.75	.50

FLOWER SHOW ANNOUNCEMENTS IN NEXT ISSUE

RURAL PLANNING COMMITTEE FOR EVERY COUNTY

HAS your county a Rural Planning Committee or County Park Board? Every county should have either a Committee or Park Board according to the Wisconsin Statutes and horticulturists will realize the benefits of such a committee.

In La Crosse County the rural planning committee has done a great deal of good work by creating picnic grounds for farmers and backing the Better Home Grounds contest.

The following are a few of the main points of section 97.17 of the Statutes.

(1) In each county there shall be a county rural planning committee. Such committee shall consist of the chairman of the county board, the chairman of the county state road and bridge committee, and the county superintendent of schools, ex officio members, and two others, either men or women, to be appointed by such ex officio members. The chairman of the county board shall be chairman of such committee, and in counties having more than one superintendent of schools, the superintendent to serve on such committee shall be designated by the chairman of the county board.

(2) It shall be the duty of the rural county planning committee: (a) To keep itself informed of the progress of rural planning in this and other countries. * * (b) To advise regarding the planting and protection of trees, shrubs and flowers along all highways within the county to the end that they shall be so located as not to interfere with the maintenance of said highway, and that only trees, shrubs and flowers native to Wisconsin be used for this purpose. (c) To consider and provide for the establishment of community parks and woodlands, proportioned and situated so as to provide ample and equal facilities for the residents of the county. (d) To propose to the county board the setting aside of places of historic interest and the protection and preservation of unique and picturesque scenery along rivers, lakes and streams, or other scenery or features and remarkable, to the end that they may be continued and preserved.

(3) Any county wherein there exists a county park board shall not create a county rural planning committee but in such county the county park board shall exercise and be possessed of all the powers and duties imposed upon the county rural planning committee by this section.

About the Home and Garden

MRS. C. E. STRONG, Editor 80th and George St., West Allis

IF YOU ARE NOT SATISFIED WITH YOUR GARDEN

THIS is the time of the year when we can correct the faults we discovered in our gardens during the spring and summer.

Is there a somber spot? Has the border a spotted look instead of harmonious groupings? Have the shrubs grown so tall they seem out of place and you wish they were farther in the background?

Are you planning a pool or a rock garden?

This is the time of the year when all of these things can be done in a very satisfactory manner, because—you can see just how much space you have for every plant. The ground is usually in a good workable condition so that the plants or shrubs can be moved easily, with a very good chance of entirely recovering from the shock before blooming time comes again.

Have the soil in good condition; firm the earth around the plant; water thoroughly. Be sure not to forget this as it is very important. Peonies especially will respond to the watering that brings the earth in close contact and starts the roots growing promptly. I believe that many failures with Peonies is simply a lack of moisture at the time of planting.

Plant those climbing Roses you have been wanting so long, but every spring it has rained and rained so you simply could not dig in that sticky clay ground. If you plant them now the rain will soak in about the plants in the spring, coaxing them into strong healthy growth that will surprise you if you have been in the habit of doing all your planting in the spring.

Daisies from seed grown by Mrs. F. Harrison, Madison.

I hope you have not forgotten how much you admired the Crocus, Tulips, Narcissus, Daffodils in other gardens last spring, saying you were surely going to have some another year. I hope you ordered them, but—if you have not, NOW is the time to do so.

Those lovely French Lilacs, some of those wonderful Peonies seen at the flower show, and even the Iris will have time enough to become established.

After the ground is frozen, give them a mulch or covering of leaves, cornstalks, or coarse manure, then think how contented you will feel next spring when it rains and rains. Your garden is much nearer that ideal garden you dream about than it would have been if you had waited until spring to transplant.

Why, you will have time to try out some new seeds, giving them care that otherwise could not be spared.

Better still you will have time to help the new gardener who is just beginning to know the lure of a garden.

FLOWER SHOWS

IF THERE is a more interesting way of spending a day than going to a Flower show, it must be going to two Flower shows in one day.

This is what a party of flower lovers thought when they decided they must see both the Sum-Mer-Del Flower Show at Hartland and the Lake Geneva Show also, both held on the same day.

The fine display at both places proved the wisdom of our decision. One of the ladies at the Hartland show said they were afraid they would not have enough flowers to fill all the space; presently they were wondering where they were going to put them all.

All the flowers were fine, Gladiolus, Zinnias and Dahlias especially so, also a fine display of mixed bouquets and baskets of flowers.

In one class the vase or container was judged in connection with the bouquet, a good idea to use in the childrens flower

shows. They like to try new ways of putting up flowers.

There was a tiny rock and water garden with a water lily blooming as though it had grown there for months, also several tray gardens as described by Mrs. Fisher at the Lake Geneva Garden Club Convention.

There was so much to talk about and see, we wanted to stay longer but there was another show calling us, so we were obliged to go.

At the Lake Geneva show, as we expected, everything was as nearly perfect as beautiful flowers, an ideal room and skilled hands could make it. Mr. Axel Johnson was there to welcome folks and supply information, other members of this club were helping of course, but we talked to Mr. Johnson because we knew him better. His work as judge at the State Fair widens the circle of his friends.

Again and yet again we circled the exhibition rooms, every vase and display was worthy of attention, the labels on a great many of the vases adding to the interest. Note books and pencils were being used freely along with such exclamations as, "See this, isn't this lovely, I am going to try it in my garden this coming year".

More people are going to have a speaking acquaintence with flowers through the holding of Flower shows, labeling vases, and best of all talking to the visitors about the displays. One woman said, "I never knew anything about flowers at all, now I can tell French Marigolds from African Marigolds, also know annual Larkspur from Delphinium. Really I feel quite wise; it is so nice if you know the names."

I shall not attempt to describe this show, it really must be seen to be appreciated.

Again relucantly we went away, tired but happy. This was surely a perfect day.

When the children of West Allis held their Flower Show at the bank I felt as though my dreams were all coming true, for these children put on a show that would have been a credit to older people.

Carefully they listened to the reasons given by the judge for awarding prizes, eagerly they told of the gardens they had worked in so faithfully all summer.

Each child seemed happy to know they had helped to make the show a success, even though they did not win a prize.

We in West Allis are glad to think these children are interested in gardens. We believe our town will be a better place to live in because of their love for flowers.

Now that the season is almost over, write and tell Mrs. Strong about your experiences during the summer months. Have you tried any new varieties with success? Your experiences will help others.

TELL ME HOW YOU RAISE SUCH FINE DELPHINIUMS FROM SEED

BUY the very best seed you can get regardless of price, is the first and most necessary step in raising fine delphiniums.

No matter how much care you give the plants raised from inferior seed, the results will prove disappointing.

After the seed is purchased, this is my method of planting. I sow the seeds in flats or shallow boxes that have a layer of cinders or coarse gravel on the bottom; over this is a layer of sphagnum moss that has been well soaked in water. Then the flat or box is filled up with a mixture of good garden soil and sand. I rub this soil through my fingers until it is very fine. After the box is filled I water thoroughly with warm water, then scatter the seeds over the surface, the seeds having been soaked in warm water for at least twenty-four hours.

Cover the seeds lightly with a mixture of the soil and sphagnum moss rubbed very fine; water carefully with quite warm water, cover with a cloth as well as a glass until the seeds germinate, which varies from twelve to thirty days. Never allow the soil to become dry during this time. After the seeds have nicely germinated, remove cloth and glass.

As soon as the plants have four leaves, transplant to other boxes or cold frame an inch or more apart, in ground that has been enriched with some fertilizer, I prefer bone meal.

Delphiniums can be planted now in the cold frame. They will be nicely rooted plants in the spring that can be set out in the garden rows where they will bloom nicely late in the season.

The cold frame must be covered when the first freezing weather comes in order to give them as long a growing season as possible.

Because I like to use the cold frame for other seeds in the spring I sow the seeds in flats in the house about March first.

There is much pleasure in growing your own plants from seed, but they need care, during the first few months especially, that is what we are paying the greenhouse man or nursery man for when we buy plants from them.

Dear Mrs. Strong:

I am a member of the Madison Garden Club and the State Horticultural Society. I have a picture of daisies, (Mrs. C. Lothian Bell) grown from seed, which I am sending you. I thought you might like it for the magazine.

I sowed the seed last of April in seed bed. They grew rapidly and the last of July were set out in their permanent place in the garden.

I had planned them to edge a path, but they grew so tall and rank that the path was covered.

(Continued on page 30)

Potato Growers Department

J. G. MILWARD, Editor
Secretary of the State Potato Growers Association

POTATO SHOW PLANS NEARLY COMPLETED

1928 Wisconsin Potato Show to Continue Along Special Crop Exposition Lines

COMMITTEES in charge of arrangements are confident that the Rice Lake Convention and State Potato Show will surpass any previous special crop show ever held in Wisconsin.

Definite arrangements have now been made whereby the Northern Wisconsin Corn and Grain Show will be held in conjunction with the Potato Show during the same week, October 22-26. Farmers in upper Wisconsin are especially pleased at this arrangement as it will provide an exhibit and program of vital importance to agricultural developments in upper Wisconsin. This is especially true as relates to such matters as seed inspection, breeding and seed dissemination purposes, standardization and inspection.

In line with a policy adopted in recent years, the management is organizing the 1928 show as an exposition of the industry.

Gradually the old type of exhibit is being modeled into a live, active exposition of the industry. The various units or departments of the show will be on continuous display. Every organized phase of the industry will be at work on the show floor. Demonstration booths conducted by state departments will be in continuous operation. Feature exhibits on all important commercial and educational phases will be installed and in operation continuously during the show.

The Wisconsin Potato Show is not put on by state departments merely as a model or an ideal. It is essentially a demonstration, staged by participating agencies in the industry, representing actual conditions and essentially practical.

Consistent with this purpose, the state association will introduce a new feature this year, whereby a certain percentage of awards made to growers will be based upon actual season performance records. Through extension and field agencies, the association has assembled a certain amount of data and information on such phases as seed potato improvement, success with fertilizers, disease and insect control, yield and quality standards. Certain growers in communities stand out as unusually successful along specialized lines. The association believes that the annual convention and show can be made of much greater practical value by giving recognition to work of this character.

The largest and most commodious auditorium as offered by the Potato Show will be at Rice Lake. Adequate space will be provided for under one roof to house the entire show. Diagrams of floor space have been drawn providing for commercial sections, county booth exhibits — standard variety classes — educational booths conducted by state departments—moving picture booths—Boy's and Girl's Club department. The association is assured at this date of the most complete commercial section displaying on standard lines of machinery, equipment and potato growers supplies.

In cooperation with local Rice Lake committees, arrangements are now being made for several active programs and entertainment features. Rice Lake and Barron County business interests are offering fine cooperation. The Annual Potato Show bulletin will be issued in September, along with the premium lists, floor diagrams, and other show announcements.

The personnel of the Rice Lake committees is as follows:

C. A. Beggs, Rice Lake, General Chairman
A. F. Ender, Rice Lake, Publicity
G. W. Vergeront, Barron, Exhibits
Henry Schneider, Rice Lake, Entertainment
S. S. Brodt, Rice Lake, Transportation
W. G. Glendenning, Rice Lake, Transportation
Oscar Overby, Rice Lake, Window Displays
C. W. Wilcox, Rice Lake, Window Displays
J. E. Horsman, Rice Lake, Housing Committee
Bert Webster, Rice Lake, Housing Committee
James Hansen, Rice Lake, Rep. Barron County Growers

CHERRIES ARE DELIVERED TO PRESIDENT COOLIDGE

On Monday afternoon Aug. 13 at 2:00 o'clock the Door county plane left for Superior with a crate of cherries picked from the Tempelton orchards on the Bayshore. The cherries were delivered to President Coolidge at the temporary White House, Superior, Tuesday morning by Frank N. Graass state secretary of the Izaak Walton League, and Moulton B. Goff.

The plane arrived at Superior at 6:00 o'clock Monday evening after stopping a short time at Wausau while enroute. The trip both to Superior and back was pleasant and thoroughly enjoyed in spite of the fact that Mr. Goff had not previously been up in a machine.

Tuesday noon the fliers left Superior, stopping at Wausau again on their return. They arrived home shortly after six Tuesday evening.

The cherries presented to the President came from the oldest orchard in Door county. Capt. A. C. Templeton is the pioneer fruit grower of the county and planted his trees in 1902. So large were the cherries that

it took but 42 to fill a 16-quart box. A case of canned cherries was also presented to Mrs. Coolidge by Mr. Graass.

Several thousand posters were printed bringing forth the advantages of Door county. These were dropped in all the principal cities enroute. On some of the posters the name and address of the Fruit Growers' Canning company and the Reynolds' Preserving company were stamped. Anyone procuring one of these posters upon sending it to the local companies may exchange it for a Number Two can of cherries.

Karl S. Reynolds, who planned to make the trip with Mr. Graass was unable to leave at this time.—*Sturgeon Bay News.*

WHILE WE HESITATE

Once men were trying to locate a new industry having to do with a new fangled thing called an automobile. Wisconsin was doubtful about it. Michigan saw the possibilities. And today Michigan is the center of one of the greatest industries in the world. Now men are talking about another new industry. It is called "timber growing." Already a few shrewd lumbermen are going into it. It is quite different from the lumber business, for it means producing tree crops.

New timber, we are told, will be very valuable and very necessary some day. The states that have timber to sell will prosper. And again it is Michigan that sees the opportunity. For Michigan is getting federal forests into the state as fast as she can manage. President Coolidge has just approved another forest, of 500,000 acres. Michigan welcomes it, helps the federal government get started, looks around for more land for other federal forests.

Meanwhile Wisconsin is doing exactly what she did with the automobile business—considering the prospects skeptically, approaching them doubtfully. Her enabling act, to let the government come into the state, is ringed around with reservations. No federal forest must be made until the governor, the conservation commission, the land commission and every interested county has approved. And the first time the government tries it a county objects, then the land commission follows with a second objection, and the forest is kept out of the state.

That doesn't worry the federal government because it can make its forests in Michigan. But it ought to worry Wisconsin. Some day Michigan will have another new industry, perhaps nearly as important as the automobile. Timber, in 30 or 40 years, will be very valuable. Wisconsin then may realize that her industrial needs are more important than the whims of her politicians, but it will be too late. Wisconsin may get the backwash but Michigan will have the business.—*Milwaukee Journal.*

ITEMS FROM THE NORTH DAKOTA HORTICULTURAL SOCIETY

August News Letter

In a letter from Berthold, ladybugs are accused of killing elm trees. We are obliged to defend madam ladybug. She is one of your best friends and is spending her time destroying plant lice which are the real cause of injury to the elm leaves.

Don't neglect those late cabbages. Dust the plants with arsenate of lead now in order to have good sound cabbages to store next winter.

An inquirer asks why many cabbage plants produced a large number of small heads instead of one large one this year. The only reason we could suggest is the possibility of the central bud being injured by cold weather in which case there would be no large head but a group of small ones.

The papers are still printing articles telling the merits of mulch paper. If any of you folks have tried mulch paper this year in comparison with ordinary cultivation, we would like to hear from you. Thus far at the North Dakota Agricultural Experiment Station if there is any difference between mulched and cultivated plants it is the cultivated ones which are doing the best.

We are asked when to transplant asparagus from an old bed to a new one. If it is done, at all, the best time would be in the early spring. However, it is probable it would pay better to start with new plants in a new bed rather than to subdivide old established plants. At least, our commercial growers use this method.

Mention WISCONSIN HORTICULTURE when writing our advertisers.

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which describes three kinds of Lady Slippers, the dainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozens of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. TOOLE
Garry-Nee-Dule
BARABOO, WISCONSIN

News From Our Local Clubs

FLOWER SHOWS

THE month of August has been a great month for flower shows. From all sections of the state we read of flower shows having been put on by garden clubs.

The editor was fortunate in being able to attend two shows in the northern part of the state, at Superior on August 8th, and at Ellsworth on August 12th. Both exceeded the expectations of everyone.

A city without a flower show will soon be a back number. It means that every city should have a garden club under whose auspices these shows are held.

Did you ever notice the difference in the general appearance of the home grounds in a city where there has been a garden club or Horticulture Society for a number of years compared to one not having such an organization?

MADISON GARDEN CLUB FLOWER SHOW DRAWS 56 EXHIBITORS

THE Madison Garden Club put on the biggest flower show ever staged in this city at the State Capitol on August the 11th. 56 individuals entered flowers.

Mr. Robert Leitsch of Columbus judged all the entries in the advanced amateur and amateur classes. Lewis Hanson of Madison, W. A. Toole of Baraboo, W. S. Miller of Sun Prairie and Anderson Nursery of Cambridge were commercial exhibitors who exhibited without entering for premiums.

There were more than 100 varieties of gladiolus exhibited.

Is your club represented in this department this month? What you have done will be of interest to others, and will offer suggestions to new clubs. Articles should reach the office by the 20th of the month.

Sweet peas, dahlias, nasturtiums, zinnias and phlox made up about one-third of the exhibit.

George Morris and G. M. Johnson were the winners in the advanced amateurs class. J. M. Wilcox, W. H. Milward, Mrs. F. M. Long, Mrs. F. W. Wiedenfeller, and Mrs. E. F. Appleby were the outstanding winners in the amateur class.

Mrs. Frederic Wilcox was chairman of the show. Her assistants were Ernest Schneider, Charles Ovenden, Mrs. Charles Dean, George Morris, Secretary of the club, and J. H. Milward.

Miss Bertha West of Madison won first on the most artistically arranged vase of flowers.

The next flower show will be held in connection with the East Side Business Mens' Festival on September 10th to 14th. This show will feature fall flowers.

HALES CORNERS CLUB TO EXHIBIT AT STATE FAIR

First Flower Show Held in June

THE August meeting of the Hales Corners Garden Club will be held at the home of Mrs. Harry Berger on Thursday, August 23.

Mrs. Berger will be the only speaker and tell us about preparing our exhibits for the State Fair. Mrs. Berger has exhibited in the past.

The September meeting will be held September 13 at the home of Mrs. R. Triede, Hales Corners. She has 300 wonderful dahlias in her garden.

The Flower Show

The Hales Corners Garden Club held their first flower show in the lobby of the Hales Corners State Bank on June 28, 1928. In spite of almost continuous rain and cloudy weather for a week preceding the show, the amount and quality of flowers were surprising.

Mr. MacDonald, head of the flower department at Gimbels Store, Milwaukee, acted as judge in a very capable manner. Both first and second prizes for roses were won by Mr. Herman Kerler of our village. Mrs. Harry Berger won first in peonies and a large bouquet of festiva maxima, and Mrs. Chas. Fickau won second on a dozen large rose colored peonies. Mrs. Arthur Sperber had several exhibits of peonies, and very faint pink with yellow centers, a single white with yellow centers, and a very beautiful double white with a faint yellow tinge which Mr. MacDonald combined into a large basket and demonstrated arrangement of flowers in a professional way.

Mrs. Chas. Fickau of Tess Corners won first prize in delphiniums, and Mrs. Berger second. Mrs. Paul had a very lovely arrangement of various colored Delphiniums combined with meadow rue.

The mixed bouquets were all very beautiful. Mrs. Berger won first on a combination of rose colored peonies, delphiniums of two shades of blue, aquilegia in various shades of pink and white and yellow; Veronica spicata and heuchera were also used. Second prize went to Mrs. Paul for a collection of blue iris and delphiniums interspersed with coreopsis and gaillardia, coral bell and white roses. Platycodon and veronica spicata were also used, and a number of small roses with a dainty yellowish edge.

Mrs. Arthur Sperber exhibited a very fine basket arrangement of roses in many shades of pink and white. Among the roses were spikes of palest blue larkspur and aquilegia in the various pastel shades. Mrs. Dewey had a bouquet of the better known flowers, lavender and purple sweet rockets, combined with yellow English primroses. A very unique combination was California poppies and dark blue bachelor's buttons in a blue pottery vase of the same shade as the bachelor's buttons.

Another exhibit worthy of mention, was a very large collection of pyrethrum, single and double, in all shades of pink and white. There were at least two hundred blooms on a wire form in a large punch bowl. This form was made of a long narrow strip of chicken fence wire bundled and twisted up into a mass. This was put in the bowl, and flowers stuck into it, and is one of the finest racks for flowers. There were about one-hundred-twenty exhibits in all.

A great many people came to see our flowers, among them the West Allis Garden Club and many members of the Milwaukee Horticultural Society. Two of the Milwaukee newspapers sent out reporters, and photographers. The flowers were sent to the sick children at the County Institution for tuberculosis when the show was over.

MRS. ARTHUR W. JOHNSON.

MANY EXHIBITS AT SUMMER-DEL FLOWER SHOW

GREAT zinnias, rich, velvety, of many more colors than Joseph's coat; huge dahlias of rare tints, some of them with eccentric bobs; gladioli so big and so brilliant on their long spikes that each flower was quite equal to playing a solo part—these were some of the blooms which attracted special attention and admiration from the hundreds of flower lovers who crowded the exhibition hall—on ordinary days the garage of Dr. and Mrs. H. G. B. Nixon at Hartland—Friday afternoon, the occasion being the flower show of the Sum-Mer-Del Garden club.

Two Hundred Exhibits

So many more exhibits were entered than had been expected—200 in all—that the quarters were a bit crowded but nobody minded except possibly those in charge.

The flowers made a beautiful show, each exhibit of single flower or bouquet, in suitable vase or bowl or basket. In the center of the room was a lily-pond with cat-tail back-ground, the work of Miss Mary Lowerre, of Delafield, and two or three miniature gardens on trays were pretty and Japanesey. There were also baskets of vegetables each basket showing as large a variety of vegetables, and each vegetable as perfect of its kind, as possible.

Experts Were Judges

The judges were experts in floriculture—Prof. Franz Aust, professor of landscape architecture at the University of Wisconsin, Mrs. Frederic Fisher, of Lake Bluff, Ill., president of the federation of garden clubs of Illinois, and Mrs. Mildred Wright Lent, of Milwaukee, landscape architect of the White Elm nursery. First prizes were awarded to Mary A. Lowerre, Delafield; Mrs. H. B. Hitz, Nashotah; Mrs. A. W. Rogers, Oconomowoc; Miss Marie Steele, Pewaukee; Mrs. Leroy Henze, Menomonee Falls; Mrs. G. F. Harland, Pewaukee; Mrs. Freeman Whitman, Nashotah; Miss Florence Niedecken, Hartland, Mrs. B. G. Schneider, Hartland; Judge M. W. Evans, Oconomowoc; Mrs. Wilbrandt, Pewaukee; Mrs. Henry Hartwig, Hartland; Miss Morris, Nashotah; Miss Ella Shephard, Beaver Lake; White Elm Nursery, Hartland.

The flower show was also a lawn fete of charming character. Mrs. Nixon's garden is of great beauty and showed masses of flowers.

Tables were scattered about on the lawn and refreshments were served. Little girls sold

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

Wonderful Offers

50 Gladiolus Bulbs **$2.00**
Some of these varieties retail at 25c each.
You can order these by mail up to Dec. 1st, 1928.
3 Peonies **$1.50**
1 each Red, Pink, White.
Retail value $3.25.
100 Assorted Iris **$5.00**
All colors and shades.
25 Early Tulips **$1.00**
100 Early Tulips **$3.50**
25 Darwin Tulips **$1.00**
100 Darwin Tulips **$3.50**
Many different colors and shades.
6 Phlox Assorted Colors .. **$1.00**
No two alike.
6 Delphinium **$1.00**
Light and Dark.
You can order the Peonies, Iris, Tulips, Phlox and Delphinium by mail, up to Nov. 1st. 1928.
Send for price list.

F. M. Palmiter & Son
Cor. Highland Ave. and North Pine Street.
JANESVILLE, WISCONSIN

bouquets, and seedlings also were sold. The financial results go into the coffers of the club and will be used to promote gardening. "We hope to have lectures and other affairs of interest to the people. We won't use this money for ourselves alone," said a member.

The attendance was surprisingly large, many parts of the county, and other counties also, being represented.

By THEODORA YOUMANS,
The Hartland News.

OSHKOSH SOCIETY HAS FLOWER SHOW AND SPECIAL MEETINGS

THE July meeting of the Horticultural Society at Oshkosh was held at the home of N. A. Rasmussen, President of the Society, being the annual strawberry festival. There was no business meeting nor program, it being purely a social event, and there was a good attendance to enjoy the evening and the picnic supper with plenty of strawberries and cream.

The August 6th meeting was held at the home of H. C. Christensen, 1625 Ninth Street. Members gathered early in the evening so as to have time to go through the gardens and see all the lovely flowers Mr. Christensen has. A picnic supper was served out of doors, after which all gathered in the house for the business meeting. Merle Rasmussen, Chairman of the Flower Show, gave her report of that event, Mr. Ristow gave us a description of the city of Kohler, Wisconsin, having gone there on a tour with other business men of the city. From his remarks it would seem an ideal place to live, all the gardens being in good shape, and the homes and lawns well kept.

Mr. John Roe gave us a talk on his trip through the East, describing in particular the Arboretum at Boston, where from his description, will be found all the species of trees possible to grow in that section of the country, besides plants, shrubs, flowers (wild and tame), and many ideas for the one interested in landscape gardening. It extends over many acres, taking in both valley and hillside, so that one might spend many days there without seeing all the different species grown.

Mrs. Altman gave us several vocal selections, which were thoroughly enjoyed by the members present.

A rising vote of thanks was given to Mr. Ristow and several of the other members who assisted so ably at the flower show.

Miss Clara Friday was elected delegate to the summer meeting at La Crosse August 10th.

The next meeting, September 3rd, will be a corn roast at the home of Mr. Wm. Nelson which is always looked forward to as the biggest meeting of the season.

Flower Show Prize Winners

First place for the best display of columbine was won by H. W. Gerdes. Other winners were: Garden roses, Mrs. Arthur Steinborn, first, and Mrs. T. Lampel, second; dianthus, George Shaeffer; pyrethrum, H. C. Christensen; lemon lillies, Mrs. Mary Blanchard; any other lily, H. C. Christensen; and canterbury bells, Mrs. Jacob Rhyner.

Daisies, Mrs. Albert Brunka; Poppies, Mrs. Arthur Steinborn; forget-me-nots, Mrs. Jacob Rhyner and Jack Gumz; basket of wild flowers, Mrs. John Kuebler; display of blooms from shrubs, Albert Brunka; basket for table decoration, Mrs. Arthur Steinborn; bouquet of peonies by a non-member, Mrs. J. Alexander.

In the competition for the best bouquet submitted by a boy or girl, the prizes were awarded to Marion Davis, John Hamer, and Una Brunka. The largest display of peonies entered in the show was that of the Rasmussen growers. Others who had large displays were H. C. Christensen, Edwin Ristow, J. W. Roe, and Walter Brunka.

Show Well Attended

A table of delphinium which attracted much favorable attention at the show because of its beauty of color was entered by Miss Rasmussen. She also had a collection of perennials and a display of labeled shrubs. Walter Brunka was awarded first place for the best exhibit of vegetables. Other fine displays were from the Rasmussen and Christensen gardens. First place for the twenty-five finest strawberries was given to N. A. Rasmussen.

The show was well attended Thursday evening, many of the people who had previously viewed the exhibit returning to see the spectacle of the many beautiful flowers. The armory was well filled with interested persons during the two days of the show and it is believed much good has been derived in that many citizens have received added interest and incentive to to cultivate and grow flowers.

KENOSHA SOCIETY ELECTS NEW OFFICERS

THE Kenosha Horticultural Society held its annual meeting Wednesday evening August 8th at the Courthouse.

The chief business of the evening was election of officers with the following results:

John Swartz—President
Oscar Hoefer—Vice-President
Laura Marken — Sec'y and Treasurer

Mr. De Pagter, Superintendent of Kenosha Parks, was to have been our speaker, but owing to illness in the family was unable to be present. Instead the members enjoyed informal discussions on various flower topics.

The Kenosha Florists and Nurserymens' Association held their third annual flower show August 23 and 24. Our Society offered its assistance and made a special effort to increase its membership at that time.

Our next meeting is scheduled for Saturday afternoon, September 8th. A tour of Kenosha gardens is the interesting feature of this meeting.

PIERCE COUNTY HORTICULTURAL SOCIETY HOLDS FLOWER SHOW

THE Pierce County Horticultural Society held their first flower show in the Pierce County Fair Grounds at Ellsworth on August 11th and 12th. The show was a great success and surprised even those in charge with the quality and number of exhibits. A large crowd attended on Sunday afternoon.

The show was in charge of the officers of the Pierce County Horticultural Society, Mrs. A. Hurtgen, Spring Valley, President, Mrs. Frank Bliss, River Falls, Vice-president, and J. H. Graslie, Spring Valley, Secretary and Treasurer. County Agent Seyforth cooperated and helped to make the show a success.

WISCONSIN CRANBERRY GROWERS MEET

Crop is Short but Fruit of Unusual Size

CRANBERRY Growers of the Wisconsin State Association held their annual summer meeting on Tuesday, August 14th at the Pavilion near Nekoosa with nearly one hundred and sixty in attendance.

President Albert Hedler of Phillips, Wisconsin, called the meeting to order at 11:00 A. M. After business matters were disposed of Mr. A. U. Chaney of the Cranberry Exchange, New York City, gave a report of the eastern crop conditions. Despite a very heavy bloom the crop will be short, due mainly to lack of sunshine. The fruit, however, is of unusual size. A Wisconsin crop estimate was not obtainable to date but in general promises to be much better than last year. Canning of cranberries is finding much favor. Mr. Chaney spoke on the effectiveness of radio as an advertising medium.

President Hedler opened the afternoon session by a short address touching mainly on the loss to the industry of one of our oldest and most highly esteemed members, Mrs. S. N. Whittlesey who was laid to rest on May 2nd. She acted as secretary of the Association for many years until poor health compelled her to resign. Mrs. Whittlesey was fondly spoken of by members as the "Mother of the Cranberry Industry".

We were fortunate to have with us Mr. E. L. Chambers, State Entomologist, who spoke very interestingly on the work of the State Department of Agriculture and their fieldmen, also Dr. Neil E. Stevens of the U. S. Department of Agriculture who is making an intensive study of the false blossom situation, a most serious problem of growers today. County Agent R. A. Peterson gave a splendid talk on his trip through the south last winter with the Wisconsin Booster Train. Everyone was much interested in the projects that our fieldman Mr. H. F. Bain has been working on this season, viz: weather forecasting, fertilizers and acid control. Ermon Bennett spoke on methods of weather forecasting. Henry Gebhardt on the Value of Sunshine and Andrew Searles gave accounts of his early days as a cranberry grower.

It was unanimously voted to hold our next meeting on December 5th, 1928. Following adjournment several cars drove out to inspect local marshes.

CLARE S. SMITH.

TREE CULTIVATION

The question comes as to whether one should cultivate underneath the branches of trees and where on the ground is the best place to apply fertilizer. Since the feeding roots of a tree are mostly found in the space between 3 or 4 feet from the trunk and the extreme ends of the branches, this area should be cultivated and it is to this part that fertilizer should be applied.

Have You A Flower Garden?

Why Not More Perennials?

Our Northern Grown Plants

Are Always Good

Write for Catalogue

Chequamegon Flower Gardens

V. E. Brubaker, Mgr.

Washburn, Wis.

Overcoming Horticultural Troubles

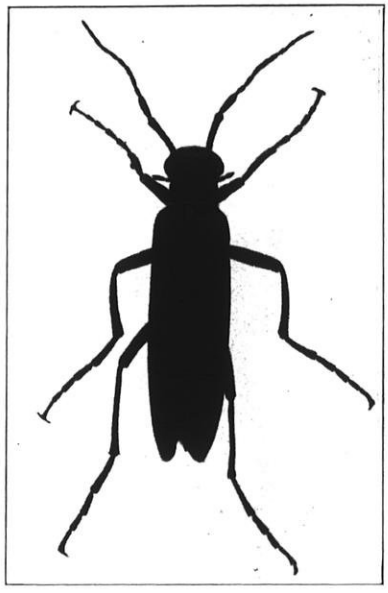
E. L. Chambers, State Entomologist, Editor

A NEW CONTROL FOR THE BLACK ASTER BEETLE

DURING the past few weeks a large number of inquiries have been received concerning the control of a "big black bug" which is eating the leaves off of the asters. This is the black aster beetle. While the socalled blister beetles have been regarded as a beneficial insect by many in that the larvae feed on the eggs of grasshoppers, yet certain species, such as this black blister beetle, are responsible for playing havoc to the foliage of not only asters but other garden plants, both flowers and vegetables. It is questionable whether blister beetle larvae have ever been sufficiently beneficial to offset the damage done by the adults.

The arsenical dusts such as calcium arsenate, Paris green and lead arsenate would poison the beetles but they decline to eat the poisoned leaves and dusting merely drives them to other feeding grounds. Recently, however, it has been discovered that sodium fluosilicate dust is an effective treatment for this pest.

While the beetles do not eat the foliage dusted with this poison to any noticeable extent, yet it has proven to be an effective treatment nevertheless. It has been observed that while the beetles do not eat this poison directly, it causes an irritation to their feet which they seek to allay by raking their feet through their mouths. Thus the beetles get the poison into their stomachs and in a well dusted area practically complete eradication results. Another habit of the beetles which aids in eradication is that of swarming together on a comparatively small area of the infested field.



The Black Aster Beetle

This is particularly noticeable when the beetles first enter a field, and if they are dusted as soon as they are first noticed, they are not likely to trouble further.

The life history of these insects is unique. The female lays a large number of eggs in a small cavity in the earth and from these hatch some small, long-legged, larvae which run about searching for the pod-like masses of grasshopper eggs upon which they feed. As soon as the appetite of one of these little egg hunters is appeased he sheds his skin and now being surrounded by food and no longer needing his long legs for running in the next stage of his existence his legs become very short and rudimentary and he remains almost immovable while feeding upon the rest of the eggs.

This species is closely related to what is known as the old fashioned potato bug and these were frequently controlled by brushing them off of the plants and driving them out of the patches of potatoes before arsenicals were in use. They were either driven into a furrow or a ditch where they were destroyed by spraying with oil or into a windrow of stock and destroyed by burning.

NEW CANADIAN NURSERY SHIPPING REGULATIONS

WE RECEIVE many inquiries concerning the regulations governing the shipment of nursery stock by parcel post from this country into Canada. According to a recent announcement by the second assistant postmaster general, W. Irwing Glover the following regulations go into effect on September 1, 1928. Thinking them to be of interest to many of our readers we quote them here.

"Nursery stock, in small quantities, may be imported through the mail provided such nursery stock is routed via any of the following ports: Halifax, N. S.; Saint John, N. B. Montreal, Que.; Ottawa, Ont. (for scientific purposes only); Toronto, Ont.; Niagara Falls, Ont.; Windsor, Ont.; Winnipeg, Man.; Estevan, Sask.; Vancouver, B. C.

"Provision has been made for the importation by mail of small quantities of nursery stock, such as new varieties of roots, bulbs, etc. The importer is required to indicate on his application for a permit that he desires to import by mail. A permit and label will be furnished to the applicant and the label should be forwarded to shipper with instructions to affix it to the parcel. The importer should indicate the number of packages it

will take to cover his consignment, as a special label must be used for each individual package.

"On arrival at one of the mail inspection ports, the shipment will be examined by an inspector and if free from pest or disease, will be passed, readdressed to ultimate destination, and forwarded in bond to the consignee. Importers are advised to notify the shipper that only the official label and the original or copy certificate of inspection should appear on the outside of the package, otherwise the package may be sent direct to the ultimate consignee, in which case it will have to be returned to an inspection port for examination.

"As a precautionary measure the shipper should place a label inside the package, giving the name and address of the ultimate consignee. Mail shipments of nursery stock incorrectly labeled and forwarded to destination without being inspected by an officer of the Department of Agriculture for Canada, should either be forwarded in bond to the nearest mail inspection port for examination, in which case the importer is required to furnish the cost of postage both to and from the said port, or be returned to the shipper."

SOCIETY MEETS AT LA CROSSE

(Continued from page 10)

tering the Farm Home Grounds Contest, they have established a number of picnic grounds in various parts of the County. The County Board appropriates $1500 per year to carry on their work. Picnic grounds are provided with tables, restrooms and other conveniences and are greatly enjoyed by the farmers and their family for picnic places. They are often filled to capacity.

The tour was under the direction of County Agent W. E. Spreiter. The results of the Home Grounds Contest were a revelation to most of the visitors. Since the Wis. Statutes provide that each county must have either a Rural Planning Committee or a Park Board, such contests will no doubt be conducted in other counties as soon as funds and help in supervision are provided.

CHERRY PICKER SETS NEW WORLD RECORD

STURGEON BAY, Wis.—What is believed to be a world record for cherry picking was made Thursday at the Martin orchard by Larry Koplinsky, Marinette, who turned in 1,104 quarts in 15½ hours. The former record was 1,020 quarts picked in 15¾ hours.—*Milwaukee Journal.*

GRASSELLI

Grasselli TRADE MARK REG. U.S PAT OFFICE SPRAY PRODUCTS

HEADQUARTERS *for* *Spray Products*

Grasselli Lime Sulphur
Grasselli Arsenate of Lead
Grasselli Nicotine

The leading Wisconsin growers prefer *Grasselli Grade* because they know from experience that brand name means *certainty* of protection and the largest yield of first grade fruit.

And while protecting your orchard, don't forget your truck crops and small fruit—they also need spraying at this time.

THE GRASSELLI CHEMICAL COMPANY,
MILWAUKEE, WIS.
Canal St. and 16th St. Viaduct
Founded in 1839

GRASSELLI GRADE
A Standard Held High for 89 Years

From Flax to Linen

The old fashioned method of making Linen

August Guschausky,
Zion, Illinois

IN THESE days of speed and mass production, time seems to be so scarce and precious, especially around cities, that people, even with the fast moving vehicles of today, rush around recklessly, even disregarding the railroad and other crossings, in their desire to save a little time.

Even the farmer who used to find time to do many useful things at home, is despite his varied labor saving machines, such as motors and tractors for plowing, mowing, threshing, grinding, etc., hard pressed for time.

Considering all this rush it might be of interest to reflect that not very long ago the European farmer averaging 200 acres of land, with the help of his wife and two or three hired men whom he hired by the year, would find time to work his land, sow, reap, thresh, and market his crop without the aid of gas or steam.

Among other things raised and made good use of, was Flax. In this day and age and in this country, where we are used to buying our supplies cooked, canned or ready made, we rarely hear the lady of the house remarking that the linen used on her table was produced by her and her daughter's hands.

Yet that was a common thing on many European farms a few years ago. Perhaps some of our young farmers might be interested in a description of this process of fifty years ago.

While I never had a hand in it, it was my privilege to observe how it was done and with due regard to the lady of the house of days gone by, I wish to pass it on.

After carefully preparing the ground, the farmer would sow the flax seed by hand, the same as any other grain. The plant grows up to the height of two feet, about the same as oats, branching out into a bushy top with tiny blue flowers, which later form into small seed capsules.

At harvest time the plants were pulled by hand, in which operation the lady of the house as well as grown children would take part.

After being tied into small bundles the flax was set up in shocks. When dry it was hauled to the barn, where the seed was threshed out by hand.

The seed after being run through a hand operated fanning mill, was sold on the market, while the plants were again bundled, hauled to a nearby creek or pool, and carefully piled into the water, after being carefully weighted down to keep it from floating, it remained there for two or three weeks.

In order to understand this operation we need to realize that the plant is woody with a covering of fibre, and the soaking is being done to partly decay the woody part and make it brittle.

After the soaking, the plants were again spread out on the ground for bleaching. When partly dry, the flax was again bundled up and shocked until fully dry, when it was hauled to the barn, to be left there until the routine of work would permit it to be taken to the drying house for final cleaning up.

The drying house was a very simple building about thirty by one hundred feet. The walls, about ten feet high and eighteen inches thick, were built of clay dug on the farm and mixed with sage grass or straw.

The gable roof was covered with straight straw which was obtained by hand threshing, leaving it as straight as it stood in the field.

This house was divided by a wall of the same material into two rooms, one the drying and the other the work room. In the smaller or drying room an enclosed fire place of ordinary field stone gathered on the farm was built in one corner, with a chimney leading through the roof.

Substantial racks made of

Peonies

FOR FALL PLANTING

Any $6.00 Collection for $5.00
Send for Our Peony List

IRIS ASSORTED COLORS

$2.00 per Dozen Postpaid

Kellogg's Nursery

Box 77 **Janesville, Wis.**

light timbers completed the fixtures of this room.

In the larger room, called the work room, were logs placed in a horizontal position about five feet apart and two feet high to the top.

On these logs were mounted the breaking tools, home made wooden affairs, resembling large shears consisting of three or four blades on upper and two or three on the lower part, all held together by a wooden peg on one end. On the other or front end only the lower half was substantial, while the upper half which ended in a handle, was movable, working up and down.

There usually was only one such house in a community, and when in late fall the actual cleaning up or breaking of the flax began, it was done in the way threshing is being done in this country.

Each farmer would furnish help and the work was kept up until done. The work of breaking was started by filling the racks of the drying room with the threshed flax and starting a fire in the fireplace.

From now on this room was kept at a fairly high temperature until the breaking season was over.

As the bundles of flax became dry and brittle they were brought out into the work room and distributed to the breakers, each person handling one of the breakers would take a handful raise the upper half of the breaker, put the flax between the shears or breaker and bear down on it, breaking or crushing it until the woody portion was broken up and could be separated with little effort.

After being broken it was handed over to the shakers, who were another group of the gang standing at an upright board about three feet high and having a light paddle in hand. Each handful of broken flax was placed over the end of this upright board and paddled and shaken until there was hardly any of the woody part left with the fibre.

After the pulp is shaken out, which concludes the operation in the breaking house, the flax was taken home and run, a handful at a time, over several spiked boards, called combs, to remove all the short and coarse part, which was used for making ropes, driving lines, bridles, tugs, grain sacks, etc., all done by the men on the farm.

After the final combing when the flax was smooth and fine and perhaps less than fifty per cent of it left, it was then turned over to the women of the household, who would spin it into fine thread and weave it into a cloth which is known under the name of linen.

While linen produced in this laborious and old fashioned way is getting scarce, I just recently, while visiting at the home of some friends, admired a somewhat out of the ordinary looking tablecloth and was told by the lady of the house, that it was produced by her grandparents, from seed to the finished product.

INDEX TO ADVERTISERS

	Page
Berg, John	30
Chequamegon Flower Gardens	25
Cumberland Fruit Package Co.	29
Fitchett Dahlia Gardens	2
Gelbke, C. A. & Sons	30
John Gumtz	6
F. R. Gifford Co.	31
Grasselli Chemical Co.	27
J. F. Hauser	23
Kellogg's Nursery	28
McLaughlin Gormley King Co.	32
North Star Nurseries	29
Palmiter	23
Phillips Garden Co.	30
Rasmussen's Fruit Farm & Nurseries	32
Sisson's Peonies	32
Stonecrest Gardens	30
The Swartz Nurseries	15
W. W. Thompson Sons	2
W. A. Toole	21
Western Stoneware Co.	31
White Elm Nursery	31

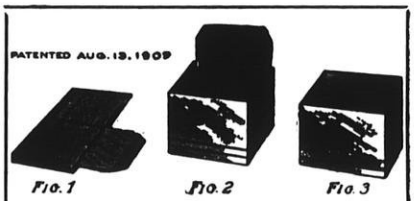


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

THE NORTH STAR NURSERY COMPANY

PARDEEVILLE, WISCONSIN

Growers of

Dependable Nursery Stock for Wisconsin Planters

Write for our illustrated catalogue of hardy stock

Our Motto

Quality - Service - Satisfaction

Landscape Contractors
Builders of Beauty

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

SHRUBS — ORNAMENTALS — ASPARAGUS Plants. West Park Nursery, C. A. Gelbke and Sons, Appleton, Wis.

1 Doz. fine Iris roots for $1.00

1 Doz. fine Peony roots for $5.00

100 Gladiolus Bulbs, $2.00
Delivered in September, October and November.

All fine varieties tagged, assorted colors, sent by express, charges collect.

All Real Bargains

Stonecrest Gardens
Eau Claire, Wis.

12 fine Peony Roots, all labeled. 8 different varieties for $5.00. Will include 1 Sarah Bernhardt.
3 Peony Roots not labeled for $1.00.
I have no plants rated under 7, so you can depend on getting good value for your money. All plants sent postpaid as soon after Sept. 15 as possible.

Send for price list.

JOHN BERG, Ashland, Wis.

STATE FAIR

(Continued from page 4)

Other winners were: Badger Dahlia Farm, Hartford; Eberhardts Nursery, Cedarburg; J. T. Fitchett, Janesville; Gimbel Bros.; Hawkes Nursery; G. Holtz and Sons; W. A. Kennedy, Jr.; R. Pruess and Sons Company; S. J. Sommers; Elmer Theirmann; Welkes House of Roses, all of Milwaukee; Rugowski Seed Company of Manitowoc; and W. A. Toole of Baraboo.

The judges were Axel Johnson, Lake Geneva, H. Baumgarten, Milwaukee, and James Taylor, Oshkosh.

DELPHINIUM

Belladonna, light blue and Bellamosum, dark blue. Fine 2 year old plants. Dozen 90c. Per hundred $6.00. Phillips Garden Co., Phillips, Wis.

ABOUT THE HOME AND GARDEN

(Continued from page 19)

In the spring I dug in around each clump, sheep manure and bone meal mixed. Then not being satisfied with this I crowded down leaves that had been in the compost heap since fall, then watered thoroughly.

They were a splendid display when in bloom about last of July and August.

If this material is of any use to you I shall be pleased.

MRS. FRED HARRISON,
Madison, Wis.

It is just such helpful letters like this with the picture that we want, it tells variety, care, fertilizer used, then the picture shows results.

We shall be very glad to have you come again Mrs. Harrison and tell us more about your flowers.

MILWAUKEE SOCIETY MEETS

THE meeting of the Milwaukee County Horticultural Society was held Tuesday evening August 28th at 7:30 P. M., in the Trustee's Room of the Public Museum.

The program was opened with a song by Mrs. O. J. Reuss entitled "Flowers" written by Henry Wadsworth Longfellow.

It was decided to hold a mixed flower show in conjunction with the Milwaukee County Rosarians to be held in the Trustee's Room at the Public Museum September 9 from 1:00 to 5:00 P. M.

Discussion followed by Mr. Louis Potter. He gave an interesting talk on iris and he informed us that the Milwaukee County Rosarians have requested a large space from the Milwaukee Park Board in one of the parks, on which the society would furnish roses of various kinds so that the public may have the benefit of seeing various kinds and types of roses grown. Mr. Potter made a resolution in which he requested the society to ask the Park Board for a large space on which may be grown various kinds of iris, the first collection to be furnished by Mr. F. X. Schreimer of St. Paul.

Mr. H. J. Rahmlow, the Secretary of Wisconsin State Horticultural Society, gave an interesting talk on garden clubs emphasizing the importance of a federation of garden clubs for the State of Wisconsin. This talk was enjoyed by those present and it was agreed to lend the support of the local society in promoting this.

A general discussion followed which concluded a very enjoyable evening.

By Frank P. Giloth.

SUM-MER-DEL MEETING

The Sum-Mer-Del Garden Club met at Mrs. R. W. Robert's home on Oconomowoc Lake, August 24.

The meeting was principally devoted to answering the following questionnaire.

How did your chosen annual result? (Last autumn we chose some annual in which to specialize.)

Our best annual?

Edging plants most pleasing?

What we have learned from our garden this year?

A Perennial for next season?

A committee was appointed to confer with Mr. Rahmlow in regard to forming a State Federation of garden clubs, and an invitation from Mr. Rahmlow was read inviting us to meet him during State Fair week in reference to any ideas on this subject we could give.

The next meeting is to be held at Menominee Falls on September 21. Talks on Flower arrangement (of cut flowers,) and each member is to contribute a chopping bowl decorated in any chosen style—flowers, ponds or pools—grasses—gardens etc.

Mrs. C. S. Hassenplug, Sec'y.

YOUNG CHERRY PICKER SETS RECORD WITH TON

STURGEON BAY, Wis.—The world record for total cherries picked in one day was broken wide open Sunday by Clayton L. Kasten, 17, of 2443 North Av., Milwaukee, who picked 1,419.2 quarts in 13 hours 30 minutes actual working time.

Kasten's feat is astonishing, veterans of the Door county orchards assert, and would be unbelievable if not backed the affidavits of timers and a checker assigned to watch him in his record breaking attempt. The youth surpassed by more than 300 quarts the world record set last week by Larry Koplinsky, Marinette, Wis., who picked 1,104 quarts in 15½ hours.

The Milwaukee boy picked this season for the Sturgeon Bay Fruit Co. It was his fourth year as a picker. After Koplinsky set the new record Kasten asked his employer for a chance to break it. Permission was necessary because pickers working for a record do not clean the trees, whereas clean picking is required of ordinary pickers.

Kasten started at 6 a. m. and quit at 9.40 p. m. He took 30 minutes for breakfast and 40 minutes for lunch and was forced to remain idle an hour because of rain. The cherries he picked weighed more than a ton and filled 83 crates.

Clarence Geisler, 833 Forty-first st., Milwaukee, timed Kasten and, with George Hartwell, 834 Twenty-seventh St., Milwaukee, watched him throughout the day. David Goldman, part owner and manager of the company, measured the fruit.

Mr. Goldman presented the champion with a silver cup.—Milwaukee Journal.

White Elm Nursery Co.
Hartland, Wisconsin
General Line of
Ornamentals and Fruits

Orchard Harvesting Supplies
Pointed Ladders
Step Ladders
Picking Bags
Picking Baskets
Wire Fruit Pickers
F. R. Gifford Co.
2201 University Ave. Madison, Wis.

Garden Urns, Oil Jars and Vases

in distinctive designs and colors

"CARDINAL BRAND" FLOWER POTS are praised by leading Florists as the best growing pots they have ever used.

Write for descriptive matter and prices of Garden Ware and Florists Pots.

Western Stoneware Co.
Monmouth, Ill.

P. O. Box G-126.

Dependable—

That is a quality we constantly strive for; we want every customer to feel confident that his orders will be cared for in a dependable manner, and that the plants he receives will be of highest quality and absolutely true to name and description.

We grow a complete line of fruit and shade trees, ornamental shrubs, perennials, climbing vines, berry plants, etc. consisting of the best varieties.

—Catalog on Request—

Visitors Always Welcome

RASMUSSEN'S

FRUIT FARM AND NURSERIES

Oshkosh **Wisconsin**

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

The Modern Insect Control

M·G·K QUALITY EVER GREEN NON-POISONOUS INSECTICIDE

Ever Green is the SAFE insecticide---harmless to man, animals and plants—yet sure death to most plant insects, both chewing and sucking varieties, including cut-worms, Aphis, Leaf Hoppers, Mealy Bugs, Thrip, Leaf Rollers, Aster Beetles, Rose Chafer, Rose Slugs, Etc.

Won't wither or burn the tenderest foliage or flowers even when used in strong solutions.

Economical—A 6 oz. bottle (for $1.00) makes 10 gallons of effective spray against Leaf Rollers. The same quantity will make 35 gallons of effective spray against aphis.

Pleasant to use. It smells so good you'll be surprised how effective it is in killing insects. No ill effects to the person spraying.

Easy to Mix—Doesn't have to be constantly agitated. Won't corrode metal or rubber.

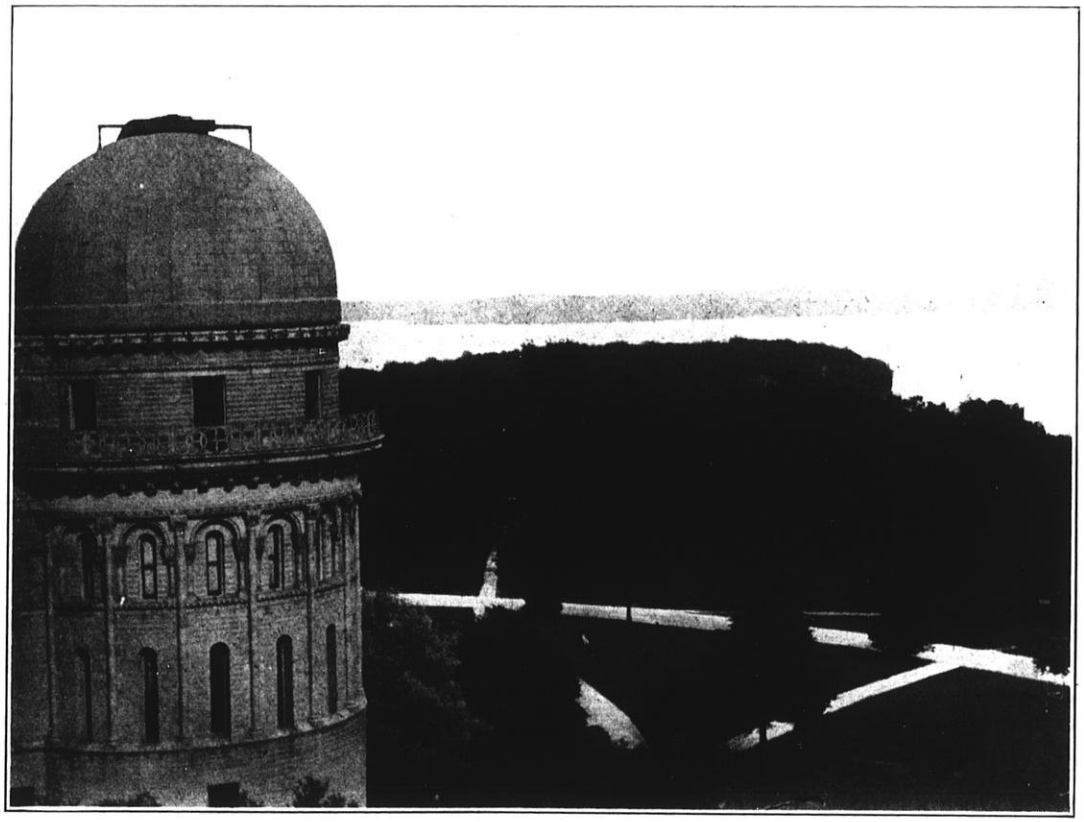
Keeps its strength indefinitely.

Try it on our money-back guarantee. Sold by druggists, hardware, seed stores and florist Supply Houses. If your dealer's supply hasn't arrived yet, send $1.00 for 6 oz. bottle, descriptive circular and spray chart.

McLaughlin Gormley King Co.

1722 S. E. Fifth St., Minneapolis, Minn.

WISCONSIN HORTICULTURE



A Glimpse of Lake Geneva from Yerkes Observatory

Vol. XIX OCTOBER, 1928 No. 2

We invite you to come to Janesville now and select from our garden the Dahlias you wish for next year. They will be sent - - named and carefully packed - - in the spring.

Why not send some to that friend's garden?

Fitchett Dahlia Gardens

735 E. Milton Ave., Janesville, Wisconsin

TABLE OF CONTENTS

	Page
The Junior Forest Rangers	35
Door County Cherry Pack	36
Do You Make Apple Cider?	37
The First Home Grounds Contest	39
From North Dakota	40
Bulbs for Early Spring Bloom	41
The State Potato Show	43
House Plants	45
Good Apples in Winter	47
The Convention Program	48
Best Varieties Committee	49
About the Home and Garden	50
The Apple Tree—Poem	51
Local Club Activities	52
West Allis School Exhibit	56
Cranberry Crop Light	57
Potato Crop Large	57
Wisconsin Free From Corn Borer	58
Blister Rust in Barron County	58
Narcissus Bulb Labeling	58
Buffalo Tree Hopper	59
Roadside Selling	60
Shall We Kill Birds?	63

Imported Holland Bulbs

200,000 finest quality at lowest prices. Orders taken now, and shipped on arrival about October 1.

Breeder tulips, aristocrat of the Darwin family in six or more of the best varieties for parks, cemeteries and private homes. Have something different than your neighbor. Only $4.00 per 100. Assorted varieties, $2.50 and up. Regular Darwin, $3.50 per 100. Best named varieties red, yellow, scarlet, pink, lavender, orange, $2.00 per 100. Best forcing varieties, $3.00 per 100.

No. 1 size Wm. Pitt, Bartigon, Princess Elizabeth, La Notre, Wm. Copland, Prof. Rauwenhof, Mad. Krelage, Clara Butt, Pride of Harlem, Farncombe Sanders, Snowdrift and Grape Hyacinths, $2.00 per 100.

Crocus—4 varieties $2.00 per 100. Fancy large $3.00 per 100.

Dutch Hyacinths, white, blue, pink, yellow, $5.00 and $8.00 per 100. Paper white for forcing $6.00 per 100.

Parrot tulips, 4 varieties $2.50 per 100.

Daffodils for forcing, mother bulbs $8.00 per 100. Emperor, Bic. Victoria, Sir Watkins, Callos White or yellow, 15¢ each. Daffodils for planting outside only $1.50 per 100. 75¢ per 100 Emperor, Sir Watkins, Bic. Victoria, Glory Sassenheim, Golden Spur, Von Sion, Spring Glory $3.00 and $5.00 per 100. King Alfred, $3.00 and $5.00 and $8.00 per 100 cash.

W. W. Thompson & Son

Station D. Route 1, Box 913 **Milwaukee, Wis.**

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS
President
J. E. Leverich, Sparta
Vice-President
C. J. Telfer, Green Bay
Secretary
H. J. Rahmlow, Madison

The Junior Forest Rangers

Let's Have Boys and Trees Grow Up Together

By W. McNEEL Junior Extension Forester

OVER 800 boys were enrolled in the Junior Forest Rangers of Wisconsin—a movement requiring some expenditure of energy on the part of its members in planting forest trees and in the study of forest conservation.

THE RUSK COUNTY DELEGATION
They won a trip to the camp by their excellent work

These boys live in 20 different counties in the state; most of them in those counties facing forest land problems. The movement is an attempt to educate a citizenry in forest conservation and to develop a wood-mindedness in the future guardians of our forests. The work has certain romantic touches about it that strikes deep into the imagination of boys. It appeals to the adventurous in them. This is commendable and should be encouraged.

The name itself — Junior Forest Ranger—is appealing. The fir tree emblem he wears is attractive. The work shirt of flannel, checkered red and black, gives him a kinship to the hardy characters of the logging days, whom he has come to admire through books and through stories he has heard.

That there is work to be done and sacrifices to be made seem to have no deterring influence. Rather these demands and exactions give the membership a challenging worthwhileness. After all, where there is no real endeavor, there can be no enduring attachments. The philosophy behind the movement is sound.

Boys Plant Many Trees

It is difficult to state just how many evergreen seedlings were planted by these lads. Placing it at 350,000 is conservative. Since the year has been very favorable for tree growth, to state that from 75% to 80% of these seedlings are now living is equally conservative. Many of the boys started nursery beds to grow their own seedlings from seed. These seedlings later will be planted in the open.

All the boys were stimulated to learn the common trees, make herbariums, learn to know and protect birds, and to get a fund of information about forests and forest life that will make them real propagandists of outdoor life and of conservation. Many leaders of these groups trained teams which gave public demonstrations on some

phases of forest conservation and propagation. Forestry booths and other exhibits appeared at many of the county fairs.

School Forests

Coupled with this effort to educate the future custodians of our forest assets, are the School Forests. These are tracts of land, 40 acres or more, given to schools to develop and preserve. At the entrance to these school forests one finds a large sign giving the name of the forest, the donor, when dedicated, and finally, in the slogan the philosophy of the work—"Youth Develops Where Youth Builds".

Looking over Nursery Beds at State Forestry Headquarters

Wisconsin is the first state to take over this plan of educating its children in forestry by means of the school forest, and Forest County has the distinction of being the first county to dedicate a school forest. The school plantation is another phase of the school forest idea. Many schools with small enrollments find it difficult to take care of a large tract of land and many other schools find no way clear to get so large a piece of land as 40 acres. These schools have found in planting and caring for the school plantation, consisting of two to five acres, a very valuable educative practice.

The care and development of school forests has been a part of the curriculum of hundreds of schools in Australia for twenty-five years. Judging from the literature, the highest governmental officials of that continent have responsibilities to perform with respect to the conduct of these school forests. The work is as well organized and stabilized as any other branch of the curriculum. It is not regarded without dignity as a "Kid's job" and the whole situation demonstrates convincingly that faith in youth and in a movement are essential to achievement.

Boys Attend Ranger Camp

Crowning the year's activities a camp was held for Junior Forest Rangers at Wild Cat Lake at a Ranger's Cottage built by the State Conservation Commission. Sixty-one boys and their leaders were in attendance. Hiking for tree identification and tree measurement, classes in simple surveying and map work, handicraft, and the planting of seedlings took the time during the day while the evenings were spent around the camp fire with movies, stories, stunts, and song. During the week, 10,000 seedlings were planted on state land as a part of the program.

This year marks the first effort in our state to involve youth in any large way in a forest upbuilding program. Many boys' organizations and movements have for some time taught tree appreciation and we have read of sporadic efforts made by groups to plant up hillsides and community lands, largely for decorative purposes. But, by and large, the conservation work with youth has been a code of ethics rather than an avenue for the expenditure of directed energy toward achievement.

Making the work a part of the 4-H club program, with definite work to do each year until adulthood is reached, is sure to make the work increasingly valuable to increasingly large numbers and provide a training that will give some assurance that the coming citizenry will merit the name we should like to give them — "efficient custodians of our forest assets".

DOOR COUNTY CHERRY PACK TOTALS ALMOST TWO MILLION DOLLARS

ACCORDING to figures given out by the Door County Fruit Growers Union the cherry pack has a total value of almost two million dollars. The following is a condensed report of the pack.

Delivered to factory	10,393,295	pounds
Martin Orchard	1,066,398	"
Egg Harbor	2,237,980	"
Sister Bay	1,527,938	"
Fresh Fruit	809,025	"
Juice Cherries	107,344	"
Total	16,141,920	pounds

Packed as follows:

84,385 cases 6-10 heavy	$453,569.38
51,649 cases 6-10 light	264,701.12
769 cases 6-10 syrup	4,871.50
77,841 cases 24-2 Natural juice	326,932.20
20,063 cases 24-2 40 degree syrup	104,327.69
8,934 cases 24-2 60 degree syrup	40,923.80
1,305 cases 24-2 20 degree syrup	6,133.50
1,178 cases 24-2 70 degree syrup	6,732.40
32,341 fresh fruit	68,468.70
Cold pack as follows	568,121.13
Total	$1,853,781.33

Do You Make Apple Cider

Good Vinegar Can Be Made on the Farm

"FRESH Apple Cider", "Pure Apple Cider, Ice Cold". We heard it many times at the State Fair. It will be heard again in other places this fall and winter.

We take a look at the amber liquid and find it clear and sparkling, so we try it. Having been properly made, it is sweet and pleasing, one of the most healthful and refreshing of beverages and we are surprised to learn that this particular cider is almost a year old.

Proper methods of preserving and pasteurizing will greatly increase the use of sweet cider and the fruit grower will thereby get a better price for his unmarketable apples than he can by trying to sell them.

Some of our good cider makers tell us that they get about three gallons of cider from a bushel of apples. If they can dispose of the cider at a fair price, they get about $1.50 per bushel for apples they would otherwise sell at a low price which has the tendency to bring down the price of good fruit.

Kind of Fruit to Use

Good cider cannot be made from partially decayed fruit. It is possible to make a good quality of cider by working over specked fruit by hand, using a knife to cut out particles of decayed material.

The first essential for making cider of good quality is to use only fully matured, perfectly sound fruit. The apple should have attained full size and color and developed the flavor and odor characteristic of the variety. Such fruit will be still a little too firm to eat out of hand.

If found necessary to pick the fruit for market before it is fully matured, the small apples to be used for cider, they may be stored for two or three weeks until they are "cider ripe". This should be done by laying a false floor over the floor of a dry airy room or roofed shed, to raise the apples above the floor so that air may circulate through the pile.

Fruit should be placed on these boards to a depth of not greater than three feet. Apples should never be piled in a heap in the orchard, as such treatment results in great loss and in a poor quality of cider. Rains spread organisms of decay through the pile and the fruit next to the ground becomes covered with dirt and takes on an earthy, foreign flavor which is imparted to the cider.

Windfalls, if sufficiently mature so that by storing they can be ripened and have good odor or flavor, will make good quality cider, especially by mixing with them quantities of more mature fruit. Partially grown, odorless, early windfalls in which the starch has not been converted into sugar are worthless for cider making.

As a rule the winter varieties make much better quality cider than the early summer varieties.

Washing and Sorting the Fruit

Washing all apples just before grinding is necessary to produce sound clean cider. Sorting should be done at the same time to remove specks and decayed apples.

In small scale operations, fruit may be dumped into large tubs of water and stirred thoroughly and taken out by hand.

The operations of washing and sorting should be done immediately before the apples are pressed so as not to allow an opportunity for the fruit to be infected with decay producing fungi.

Grinding and Pressing

The operation of grinding and pressing is usually done by machine, of which there are a great range in variety and capacity on the market. The type of press depends upon the quantity of apples available for making cider. The presses range in capacity from 20 bushel to several thousand bushel per day.

For the large producer the new hydraulic presses are very efficient.

Blending Necessary

Very few varieties of apples have sugar, tannin and acid in the right ratio to make good cider. The Winesap comes very close to being correct in this respect.

Apples may be divided into different classes as regard to the character of juices. The Duchess and others of similar flavor are high in acidity and the juices are sour. The Tolman Sweet, McIntosh, Grimes and Delicious are high in sugar and the juice insipid. The Ben Davis, Northwestern Greening and Alexander lack flavor so the juice hardly tastes as though it came from apples.

The varieties of apples are so large that the producer, if he wishes to make the best cider, should experiment by mixing his different varieties to get the best flavor. It is therefore necessary to "know your apples" for best results. When the best percentage of the different varieties has been determined the apples can always be mixed in that proportion before pressing.

Handling the Juice

As soon as the juice is pressed out it should be placed in temporary storage vessels for sedimentation. This is always necessary because the freshly pressed juice contains a large quantity of finely divided pomas which will separate out on

standing. For this purpose relatively deep narrow containers are better than the broad type. Earthern jars or old fashioned churns are very good. For larger quantities oak barrels from 30 to 40 gallons capacity are usually used.

They should be covered with some closely woven cloth to exclude dirt and should be washed often.

The coarser particles of pulp may be removed before the cider is placed in the vessel by straining through a coarse cloth. The strainer can be placed over the barrel by means of a hoop. The cloth should be of open texture to permit the juice to pass through quite freely. Closely woven cloths are useless as they clog very quickly.

Most juices made at the proper stage of ripeness of the fruit will settle fairly well over night or in 12 to 15 hours. But, in some cases, especially with soft overripe fruit, 24 to 36 hours may be necessary.

If the juice can be kept at a temperature of 50° F. it may be held 24 to 74 hours if necessary without danger of fermentation. If the weather is warm however, it may not be possible to hold the juice more than over night before fermentation sets in.

Siphoning off the Juice

When settling has been completed the juice must be drawn off without disturbing the sediment. This can be done with a piece of rubber hose as a siphon, using care so as not to disturb the sediment in the bottom.

The Horticulture Department of the Wisconsin College of Agriculture recommends the following method for keeping sweet cider sweet indefinitely.

To Keep the Cider Sweet

Sterilize fruit jars (preferably with glass top) or bottles by boiling for 15 minutes. Fill them with freshly made cider which has been well strained through coarse cloth and seal. If wooden corks are used they should be sterilized. Place jars in a wash boiler on a wooden rack so as to keep them from touching the bottom.

Cover jars with cold water and heat slowly to 175 degrees Fahrenheit. Do not let the temperature go higher. Keep pint containers at this temperature for 15 minutes, quarts for 20 minutes, half gallons for 25 minutes.

Allow them to cool in the water. After removing the bottles from the water, dip the ends of the bottles in melted paraffin so as to thoroughly seal them. (If cans were used no additional care need be given.) Store in cool dark place.

Some prefer to let the cider stand for a few days so that any sediment may settle. Then siphon off the cider and re-heat to 165 degrees. Use the same method as in the previous heating. By siphoning off the cider when it is to be used, a perfectly clear product may be had.

For directions for preparing sweet cider for sale write to the U. S. Department of Agriculture, Washington, D. C. for Farmers' Bulletin 1264.

Vinegar Making on the Farm

Sweet cider may be made into vinegar. The following instructions are also given by the University Horticulture Department for vinegar making on the farm.

The transformation of sweet cider into vinegar takes place in two stages. The first is an alcoholic fermentation which changes the various sugars contained in the cider into alcohol and carbon dioxide. The second stage is the change of the alcohol in the "hard" cider into acetic acid.

Each change is brought about by micro-organisms, alcoholic fermentation by yeast, acetic acid formation by what is commonly known as "mother of vinegar".

Under ordinary farm methods the yeast is introduced into the juice in the process of making the cider, the yeast plants being on the exterior of the fruit used. A safer method and one which hastens alcoholic fermentation is to add a yeast culture. This may be done by adding compressed yeast at the rate of one cake to each 5 gallons of cider. The yeast should be thoroughly mixed with a little water before being put into the cider.

The "mother of vinegar" is usually present in the barrel into which the cider is put. This method of securing the acetic acid formation is at times unsatisfactory, resulting in poor vinegar. A better method is to scald the barrel with steam or hot water. After the barrel has cooled it should be rinsed with a little good vinegar or "mother of vinegar". The addition of two quarts of good vinegar containing a little "mother" or an alcohol-acetic culture will make unnecessary the rinsing.

The following will aid in securing vinegar of good quality in a comparatively short time:

1. The fruit should be ripe and clean.
2. Maintain the temperature between 65 and 75 degrees Fahrenheit if possible.
3. Fill the barrel not more than half full and place it on the side.
4. Provide a good sized opening in the side of the barrel for the passage of air and carbon dioxide.
5. Keep a plug of loose cotton in the opening during alcoholic fermentation.
6. If very high quality vinegar is desired, remove the hard cider to a clean barrel being careful to discard the dregs and then add "mother of vinegar".

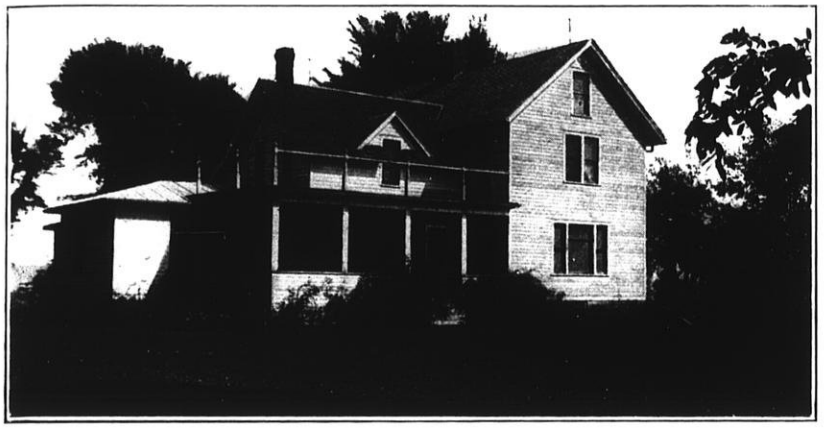
By maintaining a temperature of 65 to 75 degrees F. and

(Continued on page 60)

The First Home Grounds Contest

La Crosse Sets Pace in Farm Grounds Improvement

By JAMES G. MOORE



HOME OF JOHN WALTER, WEST SALEM
Second Prize as Best Appearing Farm Home

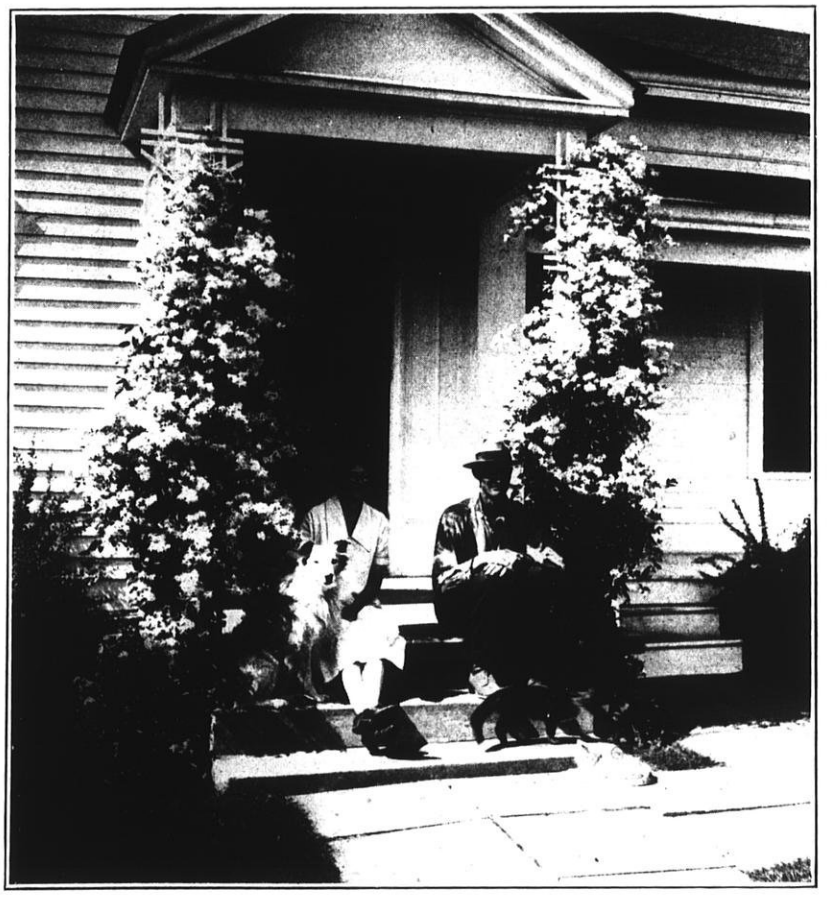
HOME grounds improvement contests have been held for years in cities and towns, but it fell to the lot of the La Crosse County Rural Planning Committee, co-operating with County Agent Spreiter and the Landscape Extension Service of the Department of Horticulture of the University to stage the first Farm Home Grounds Improvement contest carried on in the northern states.

For three years the Extension Service had been carrying on Farm Home Grounds demonstrations in La Crosse County. The farm homes selected were rather widely distributed, and while some other home owners were profiting by the demonstrations, there seemed to be something needed to bring more forcibly to the attention of the rank and file the advantages of farm home ground improvement.

Last spring the La Crosse County Rural Planning Committee set aside $100 for prizes in a contest in home grounds improvement of the farm homes along Trunk Highway 16 in La Crosse County. There are seventy-two farm homes along this highway. Due to the efforts of County Agent Spreiter, thirty-two of them were entered in the contest. Prizes were to be awarded for the home grounds showing the greatest improvement during the season and for the home grounds making the best appearance at the final scoring.

About May 1 all the entries were scored by James G. Moore of the Department of Horticulture. At the same time, F. A. Aust, Extension Specialist in Landscape Design gave the individual owners of the entries suggestions as to the best methods of improving their grounds. In a number of cases the materials for the planting were ordered for the contestant.

The second scoring was done August 20. In practically all



THE HOME OF WALTER HERMAN
First Prize

cases the contestants had done something to improve the appearance of their grounds. In many instances, the improvement was very marked. The fruits of Prof. Aust's suggestions were clearly evident in the plantings that had been made. Interviews with a number of the contestants revealed that they were very enthusiastic about the improved appearance of their grounds. It is safe to predict that they will not be content until further improvements have been made.

Because of the good work done by the contestants, the judge found it difficult to rank the entrants. The placings in the "Amount of Improvement Made" were: first, Henry Horman; second, E. Heyer; third, W. Herman; fourth, August Vander Ohe; fifth, Howard Houser; sixth, Charles Batzel; honorable mention, Harry Griswold. Several other contestants ranked very close to those receiving the prizes.

The home of Walter Herman, West Salem, was easily first in the "Best Appearing Home Grounds" class. Mr. and Mrs. Herman deserve much credit for the very excellent appearance of their farm home. It is not only a credit to them, but a good example and an incentive for better home grounds to the community. The other awards in this class were: John Walter, second; Henry Horstman, third; W. J. Ranney, honorable mention.

Another View of the Walter Herman Farm Home Which Won First Prize

The results of this contest were so marked that it has been decided to continue it next season. Judging from the results the first year, it would appear that this method will prove to be one of the most effective in spreading the gospel of more attractive home grounds.

Cabbage is becoming almost as great a staple as potatoes. Kraut juice is drunk for health.

FROM NORTH DAKOTA

By SEC. YEAGER

Leave the Asparagus Tops

Everybody knows that next year's asparagus crop is made by this year's tops and stored in the roots. When we cut the tops too soon, we rob the roots of part of their treasure. When we burn them we are wasting plant material and accomplishing little against beetles and disease. Asparagus does not seem urgent in its requirements for humus from outside sources. Perhaps the annual fall of tops is partly responsible for this.

The writer recently compared two pieces of similar land. One was gardened to miscellaneous crops and received twenty tons of manure annually plus about 1,200 pounds of fertilizer. The other gets fertilizer and the asparagus tops disked in the next spring. There is certainly a great difference in the tilth of the soil in favor of the asparagus ground. The former gets hard after rains and is not giving as good crops as it should. The latter is loose and pliable and seemingly in the finest of condition.

Let the asparagus tops stand until they are entirely dead.

Carrots used to be fed to the pigs. In 1923 less than 10,000 acres were grown for sale. Last year the acreage was 26,000 and 4,890 acres were shipped. Carrots are healthy.

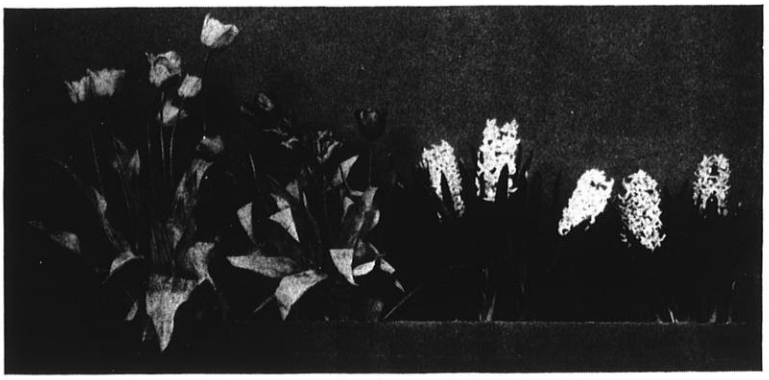
Canning crops suffered from too great a demand for fresh vegetables in 1927; sweet corn being an example of this. Cucumbers, both for table and for pickles, now enjoy so great a demand, that it is not surprising to find that 20,000 acres increase has been put on since 1921. Eggplant demand remains small but steady.

Bulbs For Early Spring Flowers

By JAMES G. MOORE

BULBS are the most satisfactory source of early spring flowers on the home grounds. There is a fairly long list from which to select and the number of varieties of some kinds is almost legion. At present Darwin tulips seem to be the most popular, but one should not be satisfied with a single type even though it be exceptionally good. In making up a list of bulbs, one should have in mind three chief requirements, earliness of blooming, a long season and reasonable variety. These requirements are better met by selecting three or four types of bulbs than in merely selecting varieties of the same type.

The following is a very good list: Single early tulips, Darwin tulips, trumpet daffodils, cup daffodils, poets narcissus, poetaz narcissus and hyacinth. One who wishes to enlarge the list and lengthen the season may add: Scilla, snow-drops, Crocus and breeder tulips with very satisfactory results.



HARBINGERS OF SPRING

Darwin tulips and single dutch hyacinths add beauty and variety to spring flowers for the home

Good Varieties

It is easier to select the types to grow than it is the varieties of each type. Personal taste enters into the problem so much that it would be very difficult if not impossible to get two growers to agree upon a list.

The following varieties are reliable and generally popular, and will be safe as a start for the beginner: Early tulips: Belle Alliance, Couleur Cardinal, Crimson Brilliant, red; Chrysolora, King of Yellows, yellow; Proserpine, Rose Luisante, Flamingo, pink; White Hawk, White Swan, white; Keizerskroon and Duchess of Parma, red and yellow.

There is a very extended list of Darwins from which to choose. We have found the following satisfactory: Clara Butt, Prof. Rauwenhoff, Massachusetts, pink; Bartigon, City of Haarlem, Pride of Haarlem, red; Dream, Rev. H. Ewbank, lavender; Faust, King Harold, La Tulipe Noire, Zulu, purple and black shades.

Of the single trumpet daffodils, so often called jonquils by the florist, Emporer, King Edward, Glory of Leyden and Golden Spur are some of the better varieties. Glory of Sassenheim and Victoria are good, two color trumpet daffodils. If double flowers are desired, Double Von Sion is unsurpassed. Sir Watkin is an excellent variety of the cup daffodil group. Mrs. Langtry and Conspicuous are two types well worth growing.

There are two district types of narcissi adapted to outdoor planting. The Poeticus ornatus is a much improved form of the old poets or pheasant's eye narcissus. King Alfred is another popular variety of this type. The poetaz narcissus is a hybrid type combining the hardiness of the poets narcissus and the flowering habit of the polyanthus or cluster flowered group. Elvira and Laurens Koster are the varieties of poetaz commonly grown.

Dutch hyacinths seem to be somewhat harder to grow successfully under Wisconsin conditions. One will make no mistake in choosing from the following list of varieties: L'Innocence and LaGrandesse, white; Queen of Blues, light blue; Grand Maitre, dark, porcelain blue; King of Blues, dark blue; Lady Derby, General De Wet, light pink; Gertrude, rose pink; Garibaldi, La Victoria, Roi de Belges, red; Yellow Hammer and King of Yellows, yellow. When one is more concerned about price than having named varieties, good results may be had by purchasing bedding hyacinths in single colors.

Where Shall I Plant?

There are three systems of bulb planting; the mass bed in the open lawn, using bulbs as adjuncts to other plants in borders and beds, and naturalizing. Most growers will be concerned only with the first two. In most cases, *using bulbs in borders or as adjuncts to shrub clumps will be much better landscape art than displaying them as gaudy beds in the open lawn.*

Bulbs can be used very effectively planted at the edge and extending slightly into shrub plantings. Mass effects can be secured by planting in small groups in areas in

borders, both house and boundary borders previously occupied by annuals. They may even be planted between late appearing herbaceous perennials, although as a rule this is not as desirable as using the space vacated by the annuals.

Of course, bulbs will always find a place in the house border. Although bulbs are ordinarily planted in front of shrubs in a border, my earliest tulips, a group which has been blooming for a number of years without disturbance, are growing along a wall in the rear of some Weigela and lilacs. They bloom early in the spring before the leaves on the shrubs hide them. *"Avoid planting bulb beds in the lawn"* I believe, is good advice for the average home owner.

Naturalizing bulbs requires areas which can be left in a semi-wild condition during the early summer and therefore is not adapted to the ordinary home grounds.

How Deep? How Far Apart?

Size of bulb and type of soil are determining factors in depth of planting. Planting may be deeper on the lighter soils than on the heavy clays. All soils should be well drained. On loam soils, hyacinths should be set with the tops about five or six inches below the surface and an inch or two shallower on heavy soils. The daffodils may be planted about the same depth as the hyacinth, while the smaller bulbed narcissi are placed four to five inches below the surface and tulips three to four inches.

When bulbs are to be planted among other plants, a trowel is usually used. Some prefer to make the opening with a broken spade handle which has been sharpened so as to make a dipper. The chief objection to this method is that on heavy or damp soils the bulbs are likely to be "hung" in the opening unless special care is taken to partly fill the opening with soil.

When bulbs are planted in areas in the border where there are no plants, spading the soil previous to planting will be advantageous. Level the surface as though seeds were to be planted. Spot the bulbs at the desired locations. Then by using a trowel, and working from the front of the area the bulbs can be set very rapidly. In those cases where it is desired to have the bulbs in bloom all at the same time, probably the best method is to remove the soil to the depth at which the bulbs are to be set.

In mass beds exactness of distance between bulbs is desirable and the bulbs should be set close enough to give almost solid color when in flower. Six inches for Dutch hyacinths, five or six inches for daffodils, four or five inches for narcissi and tulips will be satisfactory in most cases. In border planting exact distances are not necessary, in fact, variation in distance between bulbs is desirable. The bulbs should not be closer than suggested for mass planting and usually the minimum distance will be somewhat greater.

A Long Flowering Period is Desirable

Selecting varieties of different seasons of flowering is one way of providing a long season of bulb bloom. Crocus, scilla, and snow drop appear before the last snow is gone. They are closely followed by the hyacinth, daffodils, early tulips, poets narcissus, Darwin tulips, poetaz narcissus and breeder tulips. Selecting varying locations will increase the length of flowering of any one of these groups. Select sunny southern or westerly exposure for early kinds, wanted at the earliest possible date; northerly or shaded exposures for the late kinds wanted still later.

Now is the Accepted Time

If you have not planted your bulbs, do so as soon as practical. Late planting is often successful, but October planting is likely to be better. During the war, due to delay in transit, we planted bulbs as late as Thanksgiving Day, but it is inadvisable to plant in Wisconsin at so late a date.

Covering Favors Success

The bulbs we plant out of doors are called hardy bulbs and are supposed to withstand our winter climate conditions. Covering, however, favors success in two ways. First, the bulbs are less likely to be injured by unfavorable winter conditions. Second, covering gives a longer period for root development in the fall which favors earlier and better flowers. Have you ever noticed that bulbs left in from the previous season bloom in advance of those planted the previous fall? This early blooming is due to greater development before the bulbs become dormant. Roots of bulbs continue to develop after the temperature is below the point at which top growth can take place. Covering keeps the soil at a growing temperature later in the season, resulting in greater development in the fall.

The proper time to put on the cover is after the surface soil is frozen an inch or two. *Putting on a covering before freezing favors the ravages of rodents,* some of which are very fond of Dutch bulbs.

Leaves, marsh hay, lawn clippings, shredded corn stalks are all good materials for covers. Four to six inches of covering is enough for any of the hardy bulbs. A little bush or a few sticks will serve to hold the cover in place.

The cover in place, one has only to wait until the balmy days of spring awaken the bulbs from their winter's nap and make it necessary to remove their winter blanket.

The State Potato Show

Rice Lake Makes Plans for Big Event October 22–26

J. G. MILWARD

SHOW COMMITTEE AT RICE LAKE

Seated, left to right: J. E. Horsman, C. A. Beggs, Henry Schneider, Bert Webster.

Standing, left to right: W. G. Glendenning, Oscar Overby, Jim Hansen, G. W. Vergeront, A. F. Ender, C. W. Wilcox, S. S. Brodt.

THERE is every indication that the 1928 State Potato Show will exceed anything of the kind ever held. Potato growers and marketing agencies are cooperating in fine shape with State and Local Committees.

Reports received by the Secretary show that growers in the potato belts are selecting exhibit stock and all competing classes will, no doubt, be filled.

Premium lists, directions for selecting show potatoes, and special show bulletins are in circulation in producing counties.

Wisconsin Quality Potatoes for Consuming Markets is Keynote of Convention Program

Shippers and growers are calling attention to the unusually high quality of Wisconsin potatoes. There is a wonderful opportunity this year for Wisconsin potatoes to make a showing in competing markets.

Wisconsin is near the heavy consuming centers. Shipping and marketing agencies are putting out special effort to strengthen the present high standards of Wisconsin potato grades, and to promote all possible attention to sorting and grading at leading shipping points.

DEAN H. L. RUSSELL
Who will speak on Oct. 25, at Potato Show Program.

The Wisconsin Inspection Service is leading in a campaign along this line in every important potato producing section of the State.

Because of the importance of this matter, the State Potato show has created a special department featuring the important place of potatoes as a food for the average American family.

The Association is completing arrangements for the services of a trained dietitian, and practical demonstrations will be given on the Exposition Floor. These arrangements will be worked out with commercial and educational interests of the State.

We believe the time is ripe to make still more improved standards to the trade.

Space in the commercial exhibit section is rapidly being filled. *The Show is assured of a full line of machinery, equipment, and potato growers' supplies.*

Work in the rural schools has started and the department is receiving from them requests for information on standard varieties and full particulars on contests in judging and identification, to be carried out on Friday, October 26, which is designated as "Rural School Day".

PREMIUM LIST WISCONSIN POTATO SHOW

Class I. Standard Varieties

Variety—Rural New Yorker, Green Mountain, Triumph, Irish Cobbler.

Premiums on above—1st, $10; 2nd, $7; 3rd, $5; 4th, $3; 5th, $3; 6th, $2; 7th, $2; 8th, $1; 9th, $1; 10th, $1.

Early Ohio, Russet Rural, Burbank—(white and russet), Spaulding Rose (King).

Premiums on above—1st, $5; 2nd, $4; 3rd, $3; 4th, $2; 5th, $1.

Size of entries in Class I—32 tubers each. Association Ribbons awarded to all Premium Winners in Class I.

Class II. County Booth Competition

$300 to be divided among competing counties on basis of score.

Association Silver Cup awarded to first prize county exhibit.

Six highest counties receive Association Banner or Shield.

Each county booth exhibit to consist of 10 samples of 32 tubers each.

Class III. (A) Potato Club Class

All standard varieties shown in clubs fulfilling requirements for competition will be judged separately and awards made as here indicated for each variety. 1st, $5; 2nd, $4; 3rd, $3; 4th, $2; 5th, $1.

(Next 5 best $1 each).

All entries in Class III to be 32 tubers each.

Class III. (B) Potato Club Class

First Prize Potato Club Exhibit	$25
Second Prize Potato Club Exhibit	15
Third Prize Potato Club Exhibit	10

Association Shield to be awarded to First Prize Club.

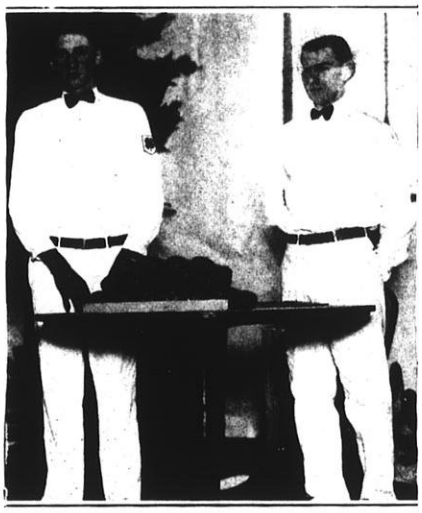
RULES AND SPECIFICATIONS GOVERNING POTATO EXHIBITS

Class I. Standard Variety Class

All entries must be entered in name of grower of sample.

Growers operating farms in partnership or members of families are permitted to make but one entry for each variety grown on farms jointly operated.

The chairman of each County Booth Exhibit may designate not to exceed 5 samples from his County Booth to compete in Class I.



MARINETTE COUNTY DEMONSTRATION TEAM AT THE 1927 SHOW

Several teams will put on Feature Programs at the Rice Lake Show.

Class II. County Booth Competition

The Association will furnish Standard Booths without charge.

Each county will be furnished a Booth Sign without charge.

All County Exhibits must be in place by Tuesday noon, October 23.

The Judging Committee reserves the right to penalize any county failing to comply with this rule. Booths will be available to County Exhibitors early Monday forenoon, October 22.

Each County Booth Exhibit must consist of 10 samples of 32 tubers.

One sample only shall be entered from any one grower in County Booth competition.

Class III. Potato Club Class

Only bona fide clubs organized under Wisconsin 4H Club rules are eligible to competition.

Individual club members in Wisconsin not represented in the Club Exhibit Class III (B) may compete in Class III (A).

Samples entered in Class III (B) shall consist of a minimum of ten samples representing a minimum of ten club members.

Only one Club Exhibit may be entered from each county in Class III (B). Such club entries may be a composite exhibit in which all clubs in the county shall be permitted to enter samples. Club entries do not compete in Class I.

The Show management requires all club members who enter to exhibit their Club Record Book at the Show. (Club leaders are requested to give special attention to this rule.)

For Premium Lists, Entry Blanks, and State Show Arrangements, write J. G. Milward, Secretary, Madison.

For Local Potato Show Arrangements at Rice Lake, write C. A. Beggs, General Chairman, Rice Lake.

The Northern Wisconsin Corn and Grain Show will be held in conjunction with Wisconsin Potato Show.

For Corn and Grain Show Premium lists, write George Briggs, Sec., U. W. Agronomy Bldg., Madison, Wis.

SAMPLE POTATOES SENT TO RURAL SCHOOLS

A SMALL sample box of potatoes containing Rural New Yorkers, Green Mountains, Triumphs, Irish Cobblers, Early Ohios and Spaulding Rose (King) is being sent to each Rural school teacher in Barron County and adjacent districts by the management of the Wisconsin State Potato Show.

These samples will enable the

(Continued on page 57)

House Plants

Changing Winter Drabness Into Summer Cheerfulness

By JAMES G. MOORE

DRY ATMOSPHERE IS THE BANE OF MANY HOUSE PLANTS
Aspidistra, (left) and Pandanus veitchi (right) stand such trying conditions very well.
Cuts by courtesy of Wis. Experiment Station

WHEN winter comes! What somber thoughts the mere suggestion brings! What longing to enliven its drabness and change its bleakness into the gladness of spring and the cheerfulness of summer!

But Nature decrees the dead, brown grass, the mantle of snow and the leafless branch. Out-of-doors man must submit to nature's dictum but indoors he rules supreme and there he can create his glorious spring and joyous summer if he will but avail himself of the possibilities easily within his grasp.

How the brilliant blossom of the geranium or the glorious splendor of a well grown pot of Darwin tulips helps in brightening our surroundings and bringing good cheer on a bleak winter day with the mercury near zero and a blizzard raging out-of-doors! Many of us miss these heralds of good cheer because we do not realize that they can be grown successfully in the home and that the pleasure in growing them amply repays for all the work.

The two chief drawbacks in growing plants in the house are too dry atmosphere, and too high temperature. The problem of too dry atmosphere is increased when houses are furnace heated, and it is particularly troublesome when hot air furnaces are used. When grown under ordinary residence conditions there is no danger of getting the atmosphere too moist for plants. Effort should be made to increase the moisture in the air above the amount normally present. The method used will depend largely upon the individual conditions. Humidifiers are very satisfactory when hot water or steam heat is used. Specially constructed evaporating pans are serviceable with hot air heat. The object, of course, is to evaporate a goodly amount of water, particularly near the plants. Any method which will accomplish this purpose is satisfactory. Sometimes the moisture in the air can be increased by substituting shallow metal pans for the pot saucers. A thin layer of coarse sand or fine gravel is spread over the

"House Plants" is the name of circular No. 222, just released by the Extension Service of the College of Agriculture. It is written by Professor J. G. Moore and contains so much of value for our readers, especially at this season of year, that it is being run in Wisconsin Horticulture.

PALMS, UNSURPASSED FOR GRACE AND STATELINESS
Left, Phoenix roebelini, one of the best palms for house decoration; center, Kentia Belmoriana, curly palm, commonly used; right, umbrella plant, a common substitute for palms.

bottom of the pan and is kept moist. When practicable this plan is superior to the use of pot saucers.

Strive for Lower Temperature

Practically all of our common house plants do best at a temperature below that to which we heat our houses. The florist grows most of his plants at a much lower temperature than that found in our living rooms.

REMOVE DUST FROM THE FOLIAGE FREQUENTLY
Sponging is slower than syringing, but is often more practical.

Probably the average temperature would be 60° to 65°. In many instances it is lower, and in only a few is it higher. The rule, then, should be that the plants should be in the cooler parts of the room rather than in the warmest, as we so commonly see them.

Another advantage of the lower temperatures is that flowers last longer in them than in the higher temperatures. This is true of all flowers, but particularly so of those which wither quickly, as paper white narcissus.

Water May Benefit or Injure

A great many failures to grow house plants successfully in summer or in winter are due to improper watering.

Forgetfulness is a common cause of faulty watering. Plants, grown at high temperature and in dry air, use large amounts of water. They should be examined at least once a day to see if they need water. Many growers of house plants follow the plan of a definite time for watering the plants. This is a laudable plan provided they are not watered whether they need it or not. The individual plant should be watered only when the soil does not contain enough moisture to last until the next watering period.

Frequently plants suffer from lack of sufficient water even though they are watered daily. This comes about because insufficient amounts are given. Enough is applied to moisten only the upper portion of the earth ball and the bottom portion remains "bone dry." When watering, put on enough to saturate the earth ball. This is indicated by water dripping from the drainage opening in the bottom of the pot. Make sure that the water coming from the drainage has gone through the soil, and has not merely run down between the sides of the pot and the earth ball.

If the water does run between the earth ball and pot, settle or push the plant into the pot after the first application and give more water; or one may water by setting the pot in a basin of water until the earth ball has become saturated. One might think at first that this would be excessive watering, but so long as the soil is well drained and there is a chance for the escape of surplus water, no harm can result.

House plants suffer from too much water as well as too little. Watering which keeps the soil water-logged drives the air out of the soil and results in a sick plant. This condition most often arises from poor drainage or from setting potted plants in receptacles, as jardiniers, which hold the drainage water around the base of the pot. The first thing to be sure of is that the plant is potted in such fashion that it is possible for excess water to drain off. Methods of providing drainage will be explained later. Occasionally the soil may be kept too moist even when there is good drainage, by too frequent application of water in liberal amounts. However, this condition is not likely to occur frequently.

When Is Water Needed?

Probably as good a general indication as any of the need for water is a hollow sound when the pot is tapped on the side. When one is not sufficiently experienced to tell by this method, the plant may be slipped out of the pot for a few times when making the test as a means of

checking on your judgment of the need for water. A change of the color of the soil from dark to light also indicates loss of soil moisture. These tests are of value only when the plant has been properly watered previously.

Dust Hinders Growth

Plants need a bath occasionally. Dust settles on the leaves and when they are coated they cannot function properly. The greenhouse man syringes his plants to remove the dust. This also is a good method for house-grown plants if conditions make its use practicable. Florists supply houses offer small rubber syringes which may be used for this purpose. The whisk broom is not a satisfactory substitute for the syringe. Most home florists will find sponging of the foliage better under their conditions than syringing, even though it requires more labor. Use a soft cloth or sponge, handling the foliage as carefully as possible. Support the opposite side of the leaf with the hand and rub away from the stem of the leaf. With the various forms of sword ferns it is probably best not to attempt to sponge the extreme tips as they are very easily injured.

WISCONSIN CABBAGE CROP SHOWS INCREASE

Production of domestic type cabbage in nine late states is forecast at 294,100 tons, or 8,000 less than the 1927 total. The New York crop is reduced very sharply to about 100,000 tons, because of lighter plantings and much lighter yield per acre.

Wisconsin on the other hand shows a great increase and may have 73,500 tons this year, much of this being grown for kraut.

Ohio and Michigan each have indicated gains of 11,000 tons, or 50 per cent over last year.

—*Racine Journal.*

Mention WISCONSIN HORTICULTURE when writing our advertisers.

Good Apples in Winter

By C. L. KUEHNER

ORCHARDISTS who did careful and timely spraying are being bountifully repaid for their labor and expense by an abundant crop of clean, sound fruit. It is a great satisfaction to know that practically all spray ring orchards belong to this class, in spite of the fact that the past season has been a difficult one in which to control "apple worms".

Many of our spray ring orchardists sold enough early apples from their orchards to pay for the entire spray bill for the season. Late apples promise to move more readily than the early ones. Choice, sound, well graded Wealthy, Snow and other varieties will sell at better prices as soon as the cull apples from the neglected orchards are all sold.

To hold apples for the winter months, it is necessary to observe certain definite precautions and practices which will insure good storage. The most important of these are as follows:

Picking: Hand pick.

Each orchardist must learn to determine the right picking time of his different varieties. It is wise to leave late maturing apples on the tree as long as the weather permits. Light frosts will not injure them.

Handling: Handle all apples with the greatest of care. Bruises and punctures usually result in decay and consequent loss.

Storage Containers: The bushel basket and the common apple box are more satisfactory for storage than larger containers. Do not store apples in bins or piles. Use clean containers. Dirty containers and poorly ventilated cellars cause musty, tainted apples.

Storage: Store only such fruit as is properly matured, free from disease, insects and injury. As soon as the fruit has been picked and placed into baskets or boxes, it should be set in a place where it will be shaded and protected from rain. The north side of a building offers a place where the fruit will be constantly cool. Apples may remain in this place until danger of hard freezing, when they should be removed to the cellar for winter storage.

The cellar should be kept at an even, low temperature, as near to 32° F. as possible. The furnace room is not adapted to apple storage. Place the containers of fruit on a false slated floor so air will circulate underneath the baskets or boxes. If the cellar has a cement floor, it may get very dry and the apples shrivel. This can be remedied by frequent sprinkling of the floor, being careful so the apples are not sprinkled. The cellar should also be ventilated by open doors and windows, especially during the night.

Wrapping the Apple: Apples such as Snow, McIntosh, Wealthy, Grimes Golden, Tolman Sweet, Golden Russett, Seek-No-Further, and many others will keep their choice qualities much better when they are wrapped in a clean piece of paper, waxed or oiled paper being the best, as it helps to prevent storage scald. This wrapping should be performed as soon as the apples are removed to their permanent winter storage. They are not in need of this wrapper while they are stored outside in their temporary storage place.

Apples as Christmas Gifts: Why not present your city or town friend with an attractively packed basket of choice eating apples? They will be highly appreciated and may bring you orders for next year.

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S. H. S., Madison, Wis.

Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison. Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103. Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. B. Goff.....Sturgeon Bay
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
George M. Moseman.....Menomonie
W. E. Spreiter.....La Crosse
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

MINNESOTA SOCIETY ANNUAL CONVENTION NOVEMBER 22-24

THE annual meeting of the Minnesota Horticultural Society will be held in Minneapolis on November 22-24.

A program of interest on all types of horticulture is being planned, also a fruit show. Any of our members who wish to attend should write to Sec. R. S. Mackintosh, University Farm, St. Paul, for a copy of the program.

THE CONVENTION PROGRAM

Milwaukee Public Museum, December 5-6-7, 1928

ALL arrangements have been made with the Milwaukee Public Museum and Library authorities for the use of the different lecture and meeting rooms for the program, and the rotunda and halls for the exhibits at our annual convention Dec. 5-6-7.

We will have the use of the three rooms each forenoon—The Museum Trustees' Room, The Library Club Room and The Library Lecture Room.

In the afternoon only two of the rooms will be available.

The program is now being arranged, but is not yet complete. We are asking for the cooperation of the different organizations in getting the very best speakers possible on their special line of interest.

The program will be divided into three sections each forenoon as follows:

1. Fruit Growers.
2. Small Fruit and Vegetables.
3. Garden Clubs and Amateurs.

The Milwaukee Gardeners Association will cooperate in putting on a fine program for vegetable growers. There will be a session each afternoon at which all will meet to hear some outstanding speaker or discuss business problems.

Fruit growers will be pleased to hear that two well known out of state speakers have promised to attend. Professor W. H. Alderman, chief of the Minnesota Department of Horticulture will talk on "New Breeds of Fruits", a subject for both small fruit and tree fruit growers and "Our Changing Horticulture", with reference to the present status of the fruit growing industry of the United States and suggestions for growers in this section.

Mr. Gus. Rogers of Beulah, Michigan well known fruit grower, will speak on the problems of the apple and cherry grower.

Mr. Rogers was formerly connected with the Horticulture Department of the Wisconsin Agricultural College and is now one of Michigan's outstanding growers of apples and cherries. Both our commercial growers and spraying members will find much of value in coming to hear Mr. Rogers.

Watch the October issue for full details.

PREMIUM LIST FOR WINTER MEETING

The premium list for our fruit and vegetable show at the Convention December 5-6-7 was published in the September issue. If you do not have a copy on hand we will be glad to send you one on request.

The flower show premiums are being approved by the Milwaukee Florist Club and will be published in November issue.

WISCONSIN is not the largest fruit producing state in the Union but there is considerable production of the different varieties in the state. The State Bureau of Crop Statistics gives us the following figures:

Apples (1925 Census) 702,456 young fruit trees and 2,204,326 trees of bearing age.

The 1925 census gave the total number of pear trees at 37,231 trees of all ages.

There were 250,226 plum and prune trees of all ages.

The acreage of cherries is increasing rapidly. The 1927 estimate was 350,000 trees of bearing age.

The 1927 strawberry acreage was 2,800 acres.

There were 220,635 grape vines of all ages according to the 1925 census.

The 1927 cranberry acreage was estimated at 3,000 acres.

THE "COUNTY" FRUIT EXHIBIT AT THE CONVENTION

THE "County" exhibit is a new department and some explanation has been asked in regard to the rules. The rules are made so that each county in the state will have an equal opportunity. Some of our counties do not have commercial growers but have a large number of sprayring members. Therefore the rule that there must be five different growers represented in the ten tray exhibit. Four of them may show one tray and the other six trays or any such number as long as there are five growers represented.

In order that County exhibits show only the best varieties in the state, the rule is made that not more than five varieties be shown and at least six trays of one or more of the following: McIntosh, Wealthy, Northwestern Greening or Snow. It does not mean that all four must be shown. In other words a county might exhibit ten trays of Northwestern Greening and score fully as high as the County that has more than one variety, providing that five different growers were represented.

These rules are much the same as are in practice at the State Potato Show and have proven very successful.

Individual tray exhibits, however, are not allowed to compete in the County exhibits.

Five or six counties have already signified their intention of entering this class. The County Agent usually is in charge.

In brief the rules are — From one to five varieties may be shown. Five growers must be represented with at least one tray or more. If several varieties are shown, at least six trays must be of the "leading" varieties mentioned above.

BEST VARIETY COMMITTEES APPOINTED

COMMITTEES for the purpose of preparing a comprehensive bulletin on the best varieties of fruits, flowers, shrubs and vegetables for Wisconsin, with cultural and explanatory notes was appointed by the Executive committee of this Society and President Leverich.

This committee has a very important function. The bulletin to be issued will cover the different varieties of horticultural crops with reference to their climatic and soil preference. It will probably be ready for distribution sometime early in 1929.

The following are the committees appointed:

Professor J. G. Moore, Horticultural Department College of Agriculture, ex-officio member of all committees.

Committee on Tree Fruits

1. M. B. Goff, Sturgeon Bay, Wisconsin, Chairman.
2. A. K. Bassett, Baraboo, Wis.
3. N. A. Rasmussen, Oshkosh, Wis.
4. D. E. Bingham, Sturgeon Bay, Wis.
5. C. J. Telfer, Green Bay, Wis.

Small Fruit Committee

1. J. E. Leverich, Sparta, Wisconsin, Chairman.
2. M. S. Kellogg, Janesville, Wis.
3. Rex Ebert, Warrens, Wis.

Vegetable Committee

1. H. C. Christensen, Oshkosh, Wis., Chairman.
2. James Livingstone, No. Milwaukee, Wis.
3. W. E. Spreiter, LaCrosse, Wis.
4. John Budzien, Milwaukee, Wis.

Shrub Committee

1. J. F. Swartz, Kenosha, Wis., Chairman.
2. Wm. Longland, Lake Geneva, Wis.
3. Huron H. Smith, Milwaukee, Wis.

Perennial Committee

1. Mrs. C. E. Strong, West Allis, Wis., Chairman.
2. V. E. Brubaker, Washburn, Wis.
3. W. A. Toole, Baraboo, Wis.

THE WISCONSIN GARDEN CLUB FEDERATION

On Wednesday, Oct. 3, representatives of 10 garden clubs met in the Milwaukee Public Museum to discuss the organization of a State Federation.

The following clubs were represented: Beloit, Delavan Lake, Elkhorn, Hales Corners, Kenosha, Madison, Milwaukee, Summer-Del, Waukesha, and West Allis.

The meeting was called at 11 A. M., and Mr. Huron Smith, of Milwaukee, was chosen chairman and H. J. Rahmlow, Madison, secretary.

Mrs. Frederick Fisher, Lake Bluff, Ill., President of the Garden Clubs of Ill., was present and gave a fine talk on What a Garden Club Federation may accomplish.

A motion was passed that steps be taken to organize a Federation, and the chairman appointed Constitution and Nominating committees to report.

The afternoon session was opened by reports from each club in regard to the organization of a Federation. All were in favor of organizing and with one exception were in favor of the Federation having some connection with the State Horticultural Society.

A constitution was then approved, each member taking a copy home for the approval of the local clubs. It will be presented for adoption at the convention in Milwaukee on Dec. 5-6-7.

The following temporary officers, to serve until the convention, were elected: President Miss Helen Moore, Sum-Mer-Dei club; Vice President, Mrs. R. H. Sage, Delavan; Recording Sec.-Treasurer, Mrs. Arthur Sperber, Hales Corners; Corresponding Secretary, H. J. Rahmlow, Madison; Executive Committee, Huron Smith, Milwaukee.

Copies of the Constitution may be obtained by any interested club by writing H. J. Rahmlow, 119 E. Washington Ave., Madison.

About the Home and Garden

MRS. C. E. STRONG, Editor 80th and George St., West Allis

Billy Cooper Likes These Trees

HOW MUCH TREES MAY MEAN TO US

LITTLE Billy Cooper loves these trees. He is very glad that his great grandfather and great great grandmother loved and planted trees for themselves and for those who came after them. He says the birds are glad too, for they come to live in the trees and sing as though they were very happy, he watched an Oriole build her nest and can tell you many things about her.

Billy will know the names of the trees so that when he sees them he can tell you, "that is an Oak, or Elm or Spruce", not just a tree. He will know them by their habit of growth, foliage, bark, etc.

Children who have been brought up with trees usually have pleasant memories and sometimes rather fanciful thoughts about some trees.

ANOTHER REMINDER

Everybody is busy I know—I am myself. But I am looking forward very hopefully for pictures and letters about gardens, your successes and sorrows.

You are interested in other folks gardens. We are interested in your garden.

Just one more reminder—those bulbs you have been intending to plant! The offers in the catalogues are very tempting and very reasonable also.

Like the advertisement; you intend to plant eventually, "Why not NOW?"

Peonies	**Narcissus**
Tulips	**Scillias**
Daffodils	

When they bloom next spring you will wonder why you waited so long to enjoy the lovely blooms in your own garden.

A very large old Transcendent crab tree with boards placed at convenient spaces to form steps or seats way up to the very top of the tree, was a favorite spot for me. Perched on the highest step I could read or day-dream without being seen from the street. The tall graceful elm with its wide flung branches made a delightful if precarious swing on a windy day; but the oak trees were my favorites. They kept their leaves, so I was sure the trees were cold and did not want the leaves to fall.

"Hush, hush", they would whisper, "stay just a little longer, you will only fade and die if you drop to the ground". So they coaxed them to stay until the sun came back warm and pleasant in the spring and the new leaves came out.

Trees have always been interesting to me. All their seasons of color are beautiful. I would not care to live where there were no trees, so I was very sympathetic when a friend who has longed for more space to grow things than is given on a city lot, told me she had at last really bought the "acre".

"I have always wanted trees", she said, "not just one or two kinds, but a variety. Really, on an acre I ought to have room enough for quite a few—elm, oak, birch, maple, willow, linden; a few of the evergreens, hickory nut, butternut, even the wild cherry, crab and thorn-apple. I would love to watch them send out their leaves in the spring, each with their own delicate shade of green. I want to see them in the fall with all the wonderful coloring they have at that time.

I want to watch them grow from year to year. I would love them so much, I would learn so much from my little trees. We would grow old together!

I have been so happy in planning this part of my acre, I knew just how some of those trees would look; I could just

After seeing the flower exhibits in the Horticultural Building at the State Fair, little Grace Ne'son arranged this table. It entitles her to "Honorable Mention".

see how beautiful my home would be in the years to come. But when I told a nurseryman what I wanted, he said that would be foolish. So many kinds of trees would not look well. I should plant not more than two varieties in groups. I am so disappointed! Would it really look so bad? He said I could not have a harmonious grouping with so many varieties."

Because I knew how much trees would mean to her, I told her first of all to go right ahead and plant trees just as she had planned. I said I thought even the nurseryman would agree that it was the only thing to do if he knew just how she felt about trees.

As for the harmonious part of it—why I was sure that would be all right, because — oak, linden, maple, ash, butternut, thorn apple, June berry, and wild cherry—planted by the hand of nature have grown from tiny brush to graceful trees, peacefully and harmoniously on the south end of a lot, admired by all who see them, dearly loved by the owners.

As I talked to her, my little friend grew happy again, "Then I really was not foolish to dream of trees growing together for me. I am so glad. Actually it made me unhappy to think perhaps I would never have some of them to watch and love".

PARSLEY JELLY FOR VARIETY

Parsley jelly is offered as a change from fruit jellies. The children may use it on bread; it goes well when added to salads with cheese, it makes nice tarts; it is relished with water crackers and cream cheese as a dessert; it may be used for anything that any other jelly may be used for.

Take any quantity of parsley. Cover with water and boil for half an hour. Then run it through the jelly press or bag. Measure, and allow one cupful of sugar to one cupful of juice. Add two or three rose geranium leaves for flavor. Boil all together until it becomes as thick as honey.

VEGETABLE HASH

1 cup of cooked rice
1 cup of green peas
1 cup of tomato pulp
1 cup of corn cut from cob
1 tablespoon of butter
1 large carrot diced
1 large onion diced
2 large green peppers diced
2 stalks of celery diced
1 teaspoon of chopped parsley
1 teaspoon of salt
1 eighth teaspoon of pepper

Fry or saute the vegetables in the butter until brown. Place all the ingredients in a bowl and mix them thoroughly. Place the mixture in a baking dish and brown it in a moderate oven.

GREEN TOMATOES AND CHEESE

Slice two onions and fry them in oil or butter until golden brown. Add sliced green tomatoes and cook slowly. When almost done, add bread crumbs, some grated cheese, and other seasoning as desired. Serve very hot. Taken from the WEEKLY UNITY.

NATIONAL CHRYSANTHEMUM SHOW

THE Chicago Florists Club extends a special invitation to the members of the Wisconsin State Horticultural Society to attend the National Chrysanthemum Flower Show which is to be held at the Stevens Hotel, Chicago, November 12 to 16, inclusive.

Exhibits from the members of your organization will be greatly appreciated. Liberal prizes are offered in all classes.

We will be delighted to welcome your members and we trust that we may have the pleasure of personally meeting a large delegation from the Wisconsin State Horticultural Society. Chicago's friendliest hospitality awaits you.

With greetings from the National Chrysanthemum Flower Show Committees.

THE APPLE TREE

By EDGAR A. GUEST

When an apple tree is ready for the world to come and eat,
There isn't any structure in the land that's "got it beat."
There's nothing man has builded with the beauty or the charm
That can touch the simple grandeur of the monarch of the farm.
There's never any picture from a human being's brush
That has ever caught the redness of a single apple's blush.

When an apple tree's in blossom it is glorious to see,
But that's just a hint, at springtime, of the better things to be;
That is just a fairy promise from the Great Magician's wand
Of the wonders and the splendors that are waiting just beyond
The distant edge of summer; just a forecast of the treat
When the apple tree is ready for the world to come and eat.

Architects of splendid vision long have labored on the earth,
And have raised their dreams in marble and we've marveled at their worth;
Long the spires of costly churches have looked upward at the sky;
Rich in promise and in the beauty, they have cheered the passer-by.
But I'm sure there's nothing finer for the eye of man to meet
Than an apple tree that's ready for the world to come and eat.

There's the promise of the apples, red and gleaming in the sun,
Like the medals worn by mortals as rewards for labors done;
And the big arms stretched wide open, with a welcome warm and true
In a way that sets you thinking it's intended just for you.
There is nothing with a beauty so entrancing, so complete,
As an apple tree that's ready for the world to come and eat.

—From Mr. Guest's Book "A Heap O' Livin'". Copyright, 1916, Reprinted by Special Permission of the publishers, Reilly & Lee, Chicago.

Lettuce acreage in 1921 was 31,460 and has steadily jumped until in 1927 it was 122,310; pepper acreage has doubled in five years; spinach more than doubled. Same with tomatoes.

Local Club Activities

Clubs Enjoy Good Programs and Tours

A GARDEN CLUB VISITS TWO CELEBRITIES

By MARK TROXELL

THE Madison Garden Club enjoyed the "still glowing embers of summer", as Thoreau described autumn's sunshine, by making pleasant pilgrimages on two consecutive Sunday afternoons to the homes of two interesting nature-lovers, both of them elderly men of Scandinavian blood, admirable in their direct simplicity and in their modesty over their unusual accomplishments.

Magnus Swenson, whose 50-acre estate lies on the shores of Lake Mendota five miles west of Madison, entertained 60 members of the Madison Garden Club on Sept. 16. We went primarily to see some huge Tropical water lilies which Mr. Swenson imports each year at an expense of from $2.00 to $20 a root. These lilies, more perfect than any dahlias, open about 10 A. M. and close before 4 P. M. at this season. They are tender and cannot survive the winter, so must be replaced each year. They are planted in an artificial pond, 32 feet in diameter, walled, with no outlet.

It was a great privilege to inspect these rare and exotic flowers, also to examine the hundreds of trees planted 20 to 28 years ago on this estate by Mr. Swenson.

H. L. Skavlem, America's most famous maker of flint arrow-heads, received us on Sept. 23 in his comfortable cottage at Lake Koshkonong, near Ft. Atkinson. He courteously ignored his temporary illness to give us a thorough explanation of his unique and extensive collection of arrow-heads, also to demonstrate how the Winnebago Indians formerly did this work on the site of his cottage.

More than 40 Garden Club members (out of a total of 102 active members) drove 50 miles on a blustery September day to enjoy the hospitality and good-fellowship of Mr. Skavlem. Our motorcade stopped in Stoughton to visit the dahlia gardens of Dr. Fred Nelson, who, like most gardeners in Dane and Rock and Jefferson counties on that frigid afternoon, was hastily cutting all of his best blooms in anticipation of the first frost. He generously handed immense flowers to all who asked for them.

HINTS FOR GARDEN CLUBS

By reading the programs of other clubs our garden clubs will find many valuable hints for their programs.

This month the Sum-Mer-Del club offers a good suggestion—a review of Prof. White's book on Flower Arrangement. If you do not have these books in your local library, try the "Free Traveling Library," State Capitol Annex, Madison.

SUM-MER-DEL HAS INTERESTING PROGRAM

THE meeting of the Sum-Mer-Del Garden Club for September was held on the 21st at the home of Mrs. LeRoy A. Henze, Menominee Falls.

Mrs. H. G. B. Nixon, President, was appointed to represent us at a meeting called for October 3 at Public Museum Milwaukee to plan and possibly effect formation of a State Federation of Garden Clubs, she to select her companion.

Mrs. A. W. Rogers reviewed Professor E. A. White's new book on "Principles of Flower Arrangement", and assisted by Mrs. Whitman gave numerous flower arrangements to illustrate points made by the author.

Mr. Hartwig gave a talk and demonstration on making "slips" for house plants such as geraniums, heliothrope, calendulas, coleous, dividing of perennials such as phlox, planting peonies and roses, and storing of dahlias, cannas and gladiolus.

An interesting feature was a display of chopping bowls, decorated with flower arrangements, and miniature landscapes, water scapes—forests, pools, pergolas, houses and scenery in varied types, of garden furniture etc.

Mrs. J. C. Hassall had the largest number of votes for the cleverest landscape and Mrs. M. M. Day for flower arrangement.

MRS. C. S. HASSENPLUG,
Sec'y.

HALES CORNERS HAS GOOD MEETING

THE September meeting of the Hales Corners Garden Club was held on Thursday, September 13 at the home of Mrs. Henry Conrad. All members were present but one.

A general discussion of flower exhibits at the State Fair occupied a good share of our time.

The Milwaukee Journal Flower Show, at which several of our members exhibited, was reported upon. Mrs. Malisch won first prize on a winter bouquet, consisting of Russian Statice and cloud grass.

The club pooled their order for peonies, thereby taking advantage of wholesale prices.

Inspection of the garden followed. Mrs. Conrad had a very wonderful showing of snapdragons and annual larkspur in many shades and colors.

Lunch was served.

MRS. A. W. JOHNSON.

Mention Wisconsin Horticulture when writing to advertisers.

MILWAUKEE SOCIETY DISCUSSES AUTUMN FLOWERING PLANTS

By FRANK P. GILOTH

THE September meeting of the Milwaukee County Horticultural Society was held Tuesday evening, September 25th at 7:30 P. M. in the Trustee's Room of the Public Museum.

The program was opened with a Nature Poem entitled "Flower Legions" read by Miss M. Krienitz.

A symposium of autumn flowering plants was given by members of the Society. Mr. Archie Hill opened the discussion on fall asters and daisies and gave quite an interesting talk on this subject. His talk indicated that more attention is being given to our native asters and the public is beginning to appreciate the significance of this flower because of its wide range of color.

Mrs. Strong gave a very interesting talk on annual asters. At one time she raised these quite extensively and handled the subject in a very interesting way.

Our President, Mr. Huron Smith, who has spent a greater portion of the summer with the Winnebago Indians, told us of his interesting experiences with these people. They are interested in agricultural pursuits more than other Indians. A man of his understanding of botany and knowledge of horticulture, and particularly being interested in the problems of the Indian would be able to enjoy a very interesting summer, and his talk indicated that his time was well spent.

Upon motion made and carried ten delegates were appointed to attend the meeting to be held October 3rd at which time it is hoped that a federation of the Horticultural Societies of the State will be formed.

Various members of the Society commented on the splendid work of the present garden commission of the City of Milwaukee and a motion was unanimously carried requesting the Milwaukee Common Council to continue the activities of the Garden Commission.

This was followed by the usual procedure of asking questions and being answered by members of the Society.

Our next meeting will be held October 23rd at which time we will have a symposium on lilies which will be given by members of the Society.

DOOR COUNTY FLOWER SHOW ASSOCIATION DOES GOOD WORK

THE last week in April 1927, the above organization elected the following officers: Mrs. S. R. Miles, President; Mr. Karl Reynolds, Vice-president; Mrs. Phil Ombeck, 2nd Vice-president; Mr. B. F. Rusy, Secretary; Treasurer, Advisory Board, Mrs. H. E. Stedman, Mrs. Wm. Kinnaird, Mrs. T. A. Egan.

We put on a very creditable Iris show with thirty-seven entries. July 4th we put on a big peony show for the American Legion Celebration. Later we demonstrated that some very beautiful roses can be grown in Door County making a pretty showing as our first rose show.

Having decided to give cash premiums for our fall flower show, an afternoon bridge tea netted us a neat sum. The last week in August we displayed to our local people and the many tourists a wonderful showing of our fall flowers. Tourists were kind enough to say that no such display could be seen either in Illinois, Missouri or Ohio. We were told that our display was equal to the flower show held at Madison. We charged ten cents admission, and also decided that it was a wise move to give cash premiums. (Later we may educate our people to the belief that a trophy is as good as cash).

Year 1928

We began this year with a tulip show held in our garage show rooms. We gave only honorable mention in local papers last year. This year we have judges award ribbons which adds to the interest. Our Iris show was more beautiful than last year. We introduced a social feature. Tea, cakes and ice cream were served while we enjoyed the flowers and listened

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which describes three kinds of Lady Slippers, the dainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozens of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. TOOLE
Garry-Nee-Dule
BARABOO, WISCONSIN

to interesting and instructive discussions on tulip culture. A very creditable peony show was held on July 4th in our hotel.

We have endeavored to interest the small villages throughout the county in growing better flowers. Have appointed a local chairman in each community. Our plan for July 4 was a Patriotic Peony Show. Small prizes, $5.00, $3.00, and $2.00, were offered to the seven villages asked to compete. When the writer, together with the judges made the tour of the county, finding five very creditable flower show displays in windows, with—"Welcome to our Tourists"—outlined in field daisies against a background of ferns in one window, in another the picture of our president surrounded with flags and flowers, we felt that good had been accomplished.

We stipulated that the prize money be used to help in planting a community flower plot. We will make a trip soon with the local florist to aid in the work. We also took charge of the flower show for our county fair this fall.

Our rock garden with a lily pool and a full showing of evergreens attracted much favorable comment.

Mr. Loyal DeClerc of Green Bay DeClerc Greenhouses very kindly came and judged our exhibit, offering services if he was needed in the future.

Our rock garden was arranged by our local florist—Mr. Joe DeClerc and Tom Pinney of Evergreen Nursery Company, and Kenneth Greans of Kenkern Studio.

MRS. S. R. MILES,
Pres.

(This is the type of good work being done by all of our best Garden Clubs. We suggest changing your name to "Garden Club" and holding regular monthly meetings.—*Editor.*

Mention Wisconsin Horticulture when writing to advertisers.

OSHKOSH SOCIETY HAS ANNUAL CORN ROAST

THE Oshkosh Horticultural Society held its annual corn roast at the home of Mr. Wm. Nelson, Wednesday evening, Sept. 19. About one hundred people, members and their friends, gathered around the huge bonfire to roast wieners, corn, and have a general good time.

A short business meeting was held, as this is the principal social event of the year. Miss Clara Friday, delegate to the summer meeting at La Crosse, gave us a report. There was community singing, and Miss Letitia Jones favored us with two vocal selections, accompanied on the piano by her sister, Miss Marion Jones.

This meeting ends the out-of-door meetings for the season of 1928, the Fall and Winter meetings being held at the public Museum.

Our Society put up a Horticultural booth at the County Fair this month. It won the blue badge as the most meritorious exhibit. Mr. Blake and his helpers are to be congratulated on their efforts.

AGNES PHILLIPSON,
Sec'y.

FLOWER CONTESTS

Henry Ward Beecher said that a contest of flowers was the greatest of all contests and it pleased him more than anything else. He wrote: "Happy is the man who loves flowers. There are men whose love of flowers is only the love of being praised for having them. But a contest of roses is better than a contest of horses. We had rather be vain of the best tulip, dahlia or ranunculus than of the best shot. Of all fools, the floral fool deserves the most eminence."

MADISON CLUB PICNICS ON POST FARM

Fall Flower Show Held

THE September meeting of the Madison Garden Club was held the evening of September 11th at the Post truck farm west of the city.

An outdoor supper was enjoyed at 6:00 o'clock Mr. Post providing some very delicious Cantaloupe of his own growing.

Following the social part of the meeting the members gathered in the Post farm-house to hear Col. Wm. Anderson, well known Madison garden enthusiast, talk on wild flowers and trees.

Mr. Anderson told of many species of flowers that he has seen in his travels through the country, of their habits and their methods of growing.

The report of the finance committee showed that the club was in a good financial condition.

Club Holds Flower Show

The fall flower show featuring dahlias, gladiolus and perennials and annuals was held in connection with the East Side Business Men's Fall Festival, Sept. 10-14.

The leading prize winners were George Morris, Mrs. Wm. Gilbert, Wm. Milward, Mrs. D. Bentley, Mrs. E. F. Appleby, C. M. Johnson, Mrs. James McLeedie, D. E. Lowe, H. C. Williams, Mrs. E. C. Schneider, Mrs. C. J. Storck, Mrs. Fred Harrison, Mrs. A. D. Schultz, Mrs. F. M. Wilcox, Mrs. Fred Hinze and Mrs. H. C. Hartwell.

The judging was done by Mr. F. T. Fitchett, a well known dahlia grower at Janesville. He did his usual careful work to the entire satisfaction of everyone.

The display of dahlias was especially noticeable. Many of the very best blooms of cactus and peonies were exhibited.

Mention Wisconsin Horticulture when writing to advertisers.

CRANBERRY GROWERS EXHIBIT AT FAIR

THE Wisconsin Cranberry Growers Association put on an exhibit at the Wood County fair held at Marshfield, September 3 to 7 inclusive. The booth was in charge of Clare Smith, secretary of the Association and Anne Bamberg, secretary of the Sales Company. Ten varieties of cranberries were shown on plates and also in large bouquets. The varieties included the Potter Favorite, Prolific, Early Blacks, Badgers, Bells, Bennett Jumbo, Searles Jumbo, Metallic Bells, Late Howes and a native wild berry known as the Moss berry.

A piece of natural bog showing how the berry grows proved of exceptional interest to visitors. The rake used for harvesting was shown, also the half and quarter barrel boxes in which they are shipped. Several thousand booklets containing the latest and best recipes for using cranberries were distributed to guests at the booth. An explanation of the various phases of the cranberry industry was given to all who were interested.

Visitors at the booth complimented the Association on their splendid exhibit declaring it one of the best on the grounds.

C. S. SMITH,
Sec'y.

PIERCE COUNTY HORTICULTURAL SOCIETY MEETING

OUR flower show of August 12 at Ellsworth was a financial success. We made about $103.00 of which about $35.00 covered expenses of drayage, night watchman, ribbons etc. Admission of 10¢ was charged.

At our meeting on September 7 we voted to give a prize of $3.00 for the best garden, $3.00 for the next best and, $1.00 apiece for three others. Mr. Prucha of the River Falls Normal and Mr. Seyforth, County Agent, decided on five gardens out of the 60 entered for the contest by the different members of the 4H club. We also discussed peonies, varieties, rating and planting in regard to time, place and manner.

We reviewed our flower show mistakes and discussed entries for the County Fair, September 12, 13, 14.

MRS. ALVIN D. HURTGEN,
President.

MILWAUKEE SOCIETY HAS AUTUMN SHOW

ON SUNDAY, September 16th, the Milwaukee County Horticultural Society in unison with the Milwaukee Rosarian held an "Autumn Flower Show" in the Trustees' Room of the Public Museum.

The doors were opened to the public at one o'clock, and judging from the number of people that streamed in, Milwaukeeans are a flower loving community. The room was ablaze with gorgeous Dahlias, Gladiolus, Rudbeckia and the many bright perennials of the fall of the year.

Vice-president F. Giloth, directors A. Hill and Mrs. Malish, together with Mr. Fuller and Mr. L. Burmeister had the arrangements for the show in their hands and proved very capable.

Mr. I. J. Schulte, F. Giloth and L. Burmeister acted as judges and prizes were awarded to the following:

Best mixed bouquet: Mrs. R. Malish 1st, Mrs. A. Krieger 2nd, Mrs. E. C. Haasch 3rd.

Best vase of annuals: Mrs. E. C. Haasch 1st, Mrs. T. Krainick 2nd, Miss M. Krienitz 3rd.

Best vase of Perennials: Mr. F. Giloth 1st, Mrs. C. Pohlman 2nd, Mrs. W. H. Wedgewood 3rd.

Best vase of Gladiolus: Mr. L. Burmeister, Jr., 1st, Mr. Walter Arndt 2nd.

Best vase of Dahlias: Mr. W. H. Timm 1st, Mr. H. Gutknecht 2nd.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

Wonderful Offers

50 Gladiolus Bulbs **$2.00**
Some of these varieties retail at 25c each.
You can order these by mail up to Dec. 1st, 1928.

3 Peonies **$1.50**
1 each Red, Pink, White.
Retail value $3.25.

100 Assorted Iris **$5.00**
All colors and shades.

25 Early Tulips **$1.00**
100 Early Tulips **$3.50**
25 Darwin Tulips **$1.00**
100 Darwin Tulips **$3.50**
Many different colors and shades.

6 Phlox Assorted Colors .. **$1.00**
No two alike.

6 Delphinium **$1.00**
Light and Dark.

You can order the Peonies, Iris, Tulips, Phlox and Delphinium by mail, up to Nov. 1st. 1928.

Send for price list.

F. M. Palmiter & Son
Cor. Highland Ave. and North Pine Street.
JANESVILLE, WISCONSIN

FLOWERS FOR HOSPITALS

SEVERAL cities have made a special campaign this past year to send flowers to hospital patients. The city of Appleton has done a great deal along this line under the auspices of the Post Crescent.

They have a well worked out system for gathering the flowers. The growers notify the storekeepers in different communities that they have flowers available and a flower car then calls at the home for the flowers and they are taken directly to the hospital. This has been done several times during the season and is much appreciated by the patients.

WEST ALLIS SCHOOL GARDEN CLUBS EXHIBIT FLOWERS AND VEGETABLES

A SPLENDID flower and vegetable show was put on at the West Allis High School on September 13 and 14 by the West Allis School Garden Clubs, under the direction of Mr. F. B. Coon.

The flower show featured asters, larkspurs, calendulas, marigolds, delphiniums, daisies, gladiolus, snapdragons, verbenias, annual phlox, zinnias and dahlias and a few other varieties.

This exhibit filled over two sides of the large gymnasium balcony. Mrs. C. E. Strong of West Allis was the judge and found plenty of work to do.

The vegetable exhibits were very good. Mr. H. J. Rahmlow of Madison was the judge. In the tomato class alone there were twenty-four samples of green and about an equal number of ripe tomato entries.

This is the fifth annual garden exhibit put on by the West Allis school garden clubs.

Following the judging on Friday afternoon demonstrations were given by Mrs. Strong and Mr. Ramhlow, the judges, to a large group of the club members on how to judge flowers and vegetables. The club members were then given score cards and judged samples of flowers and vegetables for premiums.

In the evening a very fine program was put on in the High School auditorium entirely by club members. It consisted of talks by the boys and girls on their club work for the year, vocal and instrumental music by different club members and a flower arrangement demonstration by the champion demonstration team, Esther Herrick and Francis Malenic, and a talk on garden clubs by H. J. Rahmlow.

Mr. Coon is to be congratulated on the splendid work he has been doing in West Allis

One of the beautiful bouquets exhibited by West Allis Club Members
—Cut Courtesy Milwaukee Sentinel

with the boys and girls and their garden clubs.

That there is a real interest in the work was demonstrated by the large attendance of children and their parents at the evening meeting and program and also by the large number and splendid exhibits in the show.

For the judging of flowers by the boys and girls a comprehensive score card was used which might be of interest to our readers:

Petals, number, arrangement, length, size.

Color, quality, harmony, brightness, depth.

Size, large, good proportion.

Shape, deep, uniformity.

Stem, length, strength, straight.

Foliage, deep green, proportion, amount.

Age, opening bud, no withered petals, not a withered flower.

Variety, true to its.

Uniformity of the flowers in bouquet.

Flower Stalks, number and quality of flowers on stalk.

(Continued from page 44)

boys and girls to study the type, culture and characteristics of the different varieties in preparing for the big rural school judging contest to be held in connection with the State Show at Rice Lake. A large number of them are expected to take part in the judging contest which will be held Friday October 26th.

CRANBERRY CROP WILL AGAIN BE VERY LIGHT

Boston—(AP)—The total crop of cranberries in the United States this year was estimated by the New England crop reporting service as 525,000 bbls. With the exception of last year's short crop, this would be the lightest since 1921.

Recent reports indicate that the Massachusetts crop will total 325,000 bbls. as compared with 370,000 bbls. harvested last year. The berries are expected to be of medium size in most places. Quality and keeping prospects are very good.—Milwaukee Journal.

POTATO CROP UNUSUALLY LARGE

THE estimated production for potatoes for the entire United States based on condition for September 1st, 1928 was 466,000,000 bushel, one of the largest crops we have ever grown.

In 1927 the estimate was 402,000,000 bushel and the average fruit production for the years of 1922-26 were 393,000,000 bushel.

Whenever the crop goes much above 400,000,000 bushel, the price is bound to be low and such is the case this year.

The quality is very good this year and it is unfortunate that it is impossible to do anything to increase the price to growers who are now getting less than the cost of production for high quality spuds.

During the month of September growers in the producing section were only getting from 18 to 24¢ a bushel delivered to the warehouses for No. 1 potatoes.

The old timers who have been in the game for a long time however, are not so discouraged as one might suppose. They realize that this has occurred every six to eight years in the past and probably will occur again. They grow potatoes every year and usually come out on top for an average of five years or more.

Certified growers are getting a relatively higher price. Good quality stock especially, will pay well above the cost of production.

SEVENTH MID-WEST HORTICULTURAL EXPOSITION

Memorial Building, Cedar Rapids, Iowa, November 14-17, 1928

THIS Horticultural Exposition will be held in the new million dollar Memorial Building at Cedar Rapids, Iowa, November 14 to 17, inclusive, 1928 and will include exhibits from the 17 middle western states. Honey entries are open to the world.

This Exposition includes exhibits of fruits, nuts, flowers, vegetables, honey, home canned products, educational exhibits and demonstrations. Around $7000.00 will be offered in cash premiums. Anyone interested in securing a premium list should write to the Iowa State Horticultural Society, State House, Des Moines, Iowa.

Have You A Flower Garden?

Why Not More Perennials?

Our Northern Grown Plants

Are Always Good

Write for Catalogue

Chequamegon Flower Gardens

V. E. Brubaker, Mgr.

Washburn, Wis.

Overcoming Horticultural Troubles

E. L. Chambers, State Entomologist, Editor

WISCONSIN STILL FREE FROM CORN BORER

THE European Corn Borer has continued its westward spread along the entire "western front" of the infested area comprising the northern half of Ohio, Northeastern quarter of Indiana and the greater part of the State of Michigan, but is still nearly a hundred miles from our state line.

The department has maintained a force of 16 scouts since the middle of July in cooperation with the federal government to guard against the possibility of an infestation getting a foothold. With silo filling well underway, the scouting was discontinued on the 15th of September after a careful check had been made of all of the counties bordering on Lake Michigan where sweet corn fields were carefully inspected for any evidence of the injury or presence of the borer. While some of our native borers doing similar injury to corn and other plants were sent in by the scouts not a single specimen of European corn borer was found.

As the corn borer spends eleven months of the year, from July to June as a worm or larva in the stalk and since it leaves the stalks when they are plowed under in search of stalks lying exposed on the surface, it is evident any treatment that will dispose of the infested stalks and not allow any to remain on the surface will be an effective means of control. The department hopes, therefore, through its exhibits at the more important fairs, farm meetings, institutes and its moving picture film being shown about the State to be able to inform the public and thus be prepared to meet its attack when it does get within our borders.

The fact that the state has already some one hundred eleven thousand silos in itself makes the department's entomologists optimistic since the majority of the corn crop will be disposed of in the making of the necessary silage to fill them and thus destroying any borers infesting this corn.

With the adoption of the low cutting attachments now on the market, it is possible to cut the corn very close to the ground leaving practically none to harbor the borer. The plow manufacturers have likewise greatly assisted in meeting the needs of necessary machinery for clean plowing so that it is possible to completely cover up all stalks, stubble and crop remnants.

White Pine Blister Rust Found Near Barron

As a result of the scouting being done by scouts employed by the state department of agriculture in cooperation with the federal government, a new white pine blister rust infection center has been discovered near Barron, Wisconsin.

This infection, discovered on two adjacent woodlots located approximately two miles northeast of Barron, could have been prevented had the department's recommendations to protect these stands by removing the wild currant and gooseberry bushes been heeded several years ago. At that time several infections had been discovered in that section of the county and every effort possible was made with the limited funds available for carrying on this work to protect the remaining stands of white pine in that vicinity. At present many of the small white pines in these woodlots are badly infected and may have already been killed by this fungous disease which, without drastic control measures, would eventually destroy the entire stand.

The department has already completed arrangements with the owners of the farms on which these infected woodlots and others are located to cooperate in the eradication of all currant and gooseberry bushes to arrest the progress of the blister rust. This disease cannot spread directly to healthy pines from diseased trees. The removal of the alternate host plants upon which a portion of the life cycle of the rust is dependent, within 900 feet of the pines to be protected, complete control can be secured.

This disease was introduced into Wisconsin about ten years ago and now has become established in eight counties of the northwestern portion of the state. While complete eradication of the disease appears to be impracticable, its control by eradition of currant and gooseberry bushes has been entirely effective according to the department's reports.

NARCISSUS BULB LABELING REQUIREMENTS

THE United States Department of Agriculture, in an announcement issued recently, called to the attention of business houses which deal in bulbs, the labeling requirements of the revision of the narcissus bulb quarantine regulations which became effective May 15, 1928. The fall season for narcissus bulbs is now beginning and is expected to last through September and October.

Under the revised regulations, every crate, box, or other container of narcissus bulbs offered for interstate movement *by the grower* thereof shall have securely attached to it, an official Federal shipping certificate, the issuance of which is based on inspection or disinfection. In the case of a carload shipment, such certificate shall also accompany the waybill. Such certification shall remain and continue as a condition of any *reshipment* of such certified bulb for interstate movement *in original containers.*

Dealers who buy and sell such bulbs, as well as all other shippers who do not grow their own bulbs, are required to conform to the following regulation:

"Certified narcissus bulbs taken from crates or other original containers for *reshipment interstate in smaller lots* shall have securely attached to each container a tag or label signed by the shipper thereof reading as follows: *'The undersigned certifies that the narcissus bulbs contained herein were taken from a shipment of narcissus bulbs certified by the Plant Quarantine and Control Administration under Notice of Quarantine No. 62!'* "

The tags or labels described in the last paragraph are to bear the exact wording shown and to be signed by the shipper. This form of tag covering reshipments will not be supplied by the department, but is to be secured by the shipper and may be prepared by any local printer. No special form or size is required and shippers may include the wording given as a part of the address label if convenient.

Carriers are not permitted to accept for shipment containers of narcissus bulbs without the required labels. Any shipment sent without either the reshipment label described or the official shipping certificate issued to the grower will constitute a violation of the plant quarantine act, render both the shipper and the carrier liable to prosecution, and may be intercepted in transit or at destination and returned to the point of origin.

The object of the restrictions is to prevent the interstate movement of bulbs infested with the bulb flies and eelworms, and thereby protect uninfested localities from the introduction of these pests.

ORCHARDS ARE ATTACKED BY PEST

Buffalo Tree Hopper Infesting Orchards in Vicinity of Casco

Apple growers of the county were alarmed this week by the appearance of the Buffalo tree hopper in young orchards in the vicinity of Casco, and have appealed to the College of Agriculture at Madison for the services of an entomologist to make a study of the insect and prevent its spread. About every young tree in a few orchards in a wide area are already infected.

According to County Agent Lathrope, the Buffalo tree hopper is the shape of a buckwheat seed and about three times as large. The insect itself lives on grass and weeds in the orchard and does not feed on the trees. The damage is done when it crawls up on the tree, makes slits in the bark, and deposits its eggs. In the making of these slits, the pest girdles the tree and finally kills it. The eggs winter in the slits and hatch in the spring. The young feed on grasses and weeds in the orchards until about September 1st when they go back to the apple tree to repeat the life cycle.

Thousands of slits and twenty-five hoppers have been found on a single tree in orchards near Casco which indicates a very serious infection. The pest multiplies very rapidly in orchards where the grass and weeds are plentiful and County Agent Lathrope advises all orchard owners that clean cultivation is the only known remedy, as sprays help but little.

The only spray partially effective is a fifty per cent nicotine sulphate spray, or 1½ pints of nicotine sulphate to 100 gallons of water. It is difficult to hit the hopper with a spray.

The pest was first noticed in this county last spring and it is thought probable that it was introduced through some nursery stock.

County Agent Lathrope is endeavoring to obtain research help from the College of Agriculture to combat the situation. — Kewaunee Enterprise.

SPRAY RINGS SAVE KEWAUNEE FRUIT CROP

On July 20th County agent Lathrope and C. L. Kuehner, Orchard specialist from the College of Agriculture inspected 15 orchards to check up on the effectiveness of the sprays and control measures which have been adopted.

Without fail each and every farm and commercial orchard inspected last week showed from 95 to 100% control in scab, apple worm, and other fungus and leaf eating insects. In sharp contrast to the orchards clean and free from pests and diseases were the unsprayed orchards. In these orchards can be found as much as 50 per cent infection from apple scab and many apple worms. Many farmers remarked to county agent Lathrope that they are absolutely sold on the spray program and "that it surely pays to spray."

Almost every cherry tree in the county that has not been sprayed shows evidence of cherry leaf slug and shot hole fungus injury. By the yellow leaves one may know the shot hole fungus and the brown leaves indicate the slug injury. One has only to get up close to the tree and examine the leaves just a little to find the slimy slugs eating away at the foliage. The spray program as put out by County Agent Lathrope readily and economically controls the orchards pests.

County agent Lathrope and C. L. Kuehner are busy preparing an orchard exhibit for the county fair this fall. Exhibits will be made of sprayed and unsprayed fruit and of the different pests and ways and means of control. Many more individual farmers are planning on making an exhibit this year also.

—*Algoma Herald.*

FLORISTS ENJOY LABOR DAY PICNIC

Members of the Racine Florists association enjoyed a picnic on Labor Day at the R. E. Miller cottage at Pan Yak park, Eagle Lake. Besides members of the local association there were guests present from Chicago, Milwaukee, and Kenosha. Games and music furnished the day's entertainment. The committee in charge of arrangements for the outing included Mrs. R. E. Miller, Miss Meta Mross, and Miss Agnes Dostal.

—*Racine Journal.*

Mention Wisconsin Horticulture when writing to advertisers.

Farmers of City Take Play in Roadside Sales

THE above is the heading of an article appearing in the MILWAUKEE JOURNAL of September 17th. Many of our fruit, flower and vegetable growers have profited by their roadside stand. They have given honest goods for honest prices and their trade should be protected. Therefore, the JOURNAL article will be of interest to our members. It reads as follows:

"An old racket with a new slant is bothering farmers within 10 miles of Milwaukee and arousing the ire of city motorists.

For years, in the fall, farmers have heaped their produce at the roadside for sale. Sometimes the entire family on Sundays "tended store." Usually 50 feet or more down the road was a sign tacked to a tree or post which read in penciled letters, "Melons, pumpkins and tomatoes for sale."

Farmers had things pretty much to themselves and found extra coin in their pockets.

Groups of city people are invading the game this year. Farmers away from the main roadside are bought up in some cases. The city racketeers erect attractive shelters, sell pop and candy in addition and also set up attractive signs—with commercial lettering—to attract the trade.

Prices Are Higher

Prices, on the average, are 50 per cent higher than elsewhere, according to comparisons made Sunday.

Despite this motorists are buying their produce anyway, on the ground that "the stuff looks nicer."

Along the well traveled highways the farmers are angry. Sunday on the new Blue Mound road a motorist stopped before one of the city shelters. He had women in his automobile look over the produce arranged with an eye for color.

"Your prices," one of the women remarked, "are much too high."

The city saleswoman of the country turned her back and called over her shoulder, "I don't care, I can get any price I want for them. We don't have to bother with you."

Articles like the above probably state the true condition of affairs. The trouble is they inform the public of this condition and the motorist stops buying from roadside stands. Then the farmers suffer equally with the "city farmers".

Can anything be done? Such roadside stands evidently are located in the country. Land for doing business must be obtained from farmers. Before allowing an outsider the privilege of putting up a roadside stand on his land, the farmer should have an agreement as to how that stand is to be operated.

Perhaps it would be still better if farmers allowed such stands to be put up only by those who produce at least part of the produce they sell."

ARE RHODODENDRONS HARDY?

Mr. E. T. Erickson of West Salem, Wisconsin writes for information on the hardiness of Rhododendrons in Wisconsin.

We will appreciate if any of our readers growing any of the different species of Rhododendrons will write us their experience and how they protect them in the winter. In general most of the Rhododendrons require an acid soil and some of the species rather a moist location, doing best near water.

THE NATIONAL FLOWER SHOW

Flowers Sent by Air-Mail throughout U. S. to Milwaukee Show

COVERING 2,446 miles by air mail the flowers sent by postal employes in Medford, Oregon won first prize at the Milwaukee postal employes' annual flower show on September 6 for the longest distance covered.

More than 150 pounds of flowers came to Milwaukee by air mail from 30 cities in the country to be exhibited in what is said to be the first nationwide flower show.

Tacoma, Washington, sent flowers 2,056 miles and Portland, Oregon, 2,306 miles.

St. Louis won first place with the best collection of flowers. The most unique flower came from Oakland, California, a tuberous begonia, and Louisville, Kentucky, had the best bouquet of mixed flowers. Portland had the best rose exhibit and Atlantic City, New Jersey, the best dahlia exhibit.

Kenosha Wins First

Kenosha won first place in the state exhibits, with La Crosse and Oshkosh second and third.

Eighty-seven prizes were awarded to Milwaukee postal employes who had entries on display.

(Continued from page 38)

adding a yeast starter and then "mother of vinegar" when alcoholic fermentation has ceased, it is possible to produce good vinegar in about one year.

What might be termed the standard spray for controlling disease on rose bushes is dusting with dust composed of nine parts dusting sulphur and one part extra fine arsenate of lead powder.

WEE GREEN APPLE WAXES POPULAR; TOUR TO SEE IT

The little green apple, subject of gastronomical pain in prose and verse, achieved considerable fame on Friday when teachers and fruit growers in this community tried, as a group, to figure out how to make the little green apple bigger and less green, and how to keep insect pests from penetrating its little green hide.

Finds Trees Too Thick

The orchard tour, sponsored by A. N. Howalt, started at noon at the school orchard, where pruning and fertilizing of a young orchard was shown. At the Pennebecker farm Mr. Pennebecker gave the history of his orchard, telling how he had to cut out every row of trees, because they were planted too close together. This mistake is commonly made in this community, orchardists report. Mr. Pennebecker also displayed a portable pruning ladder, plans for which may be obtained from the horticultural department of the state college of agriculture.

O. B. Cook, using 200 pounds pressure, illustrated the power sprayer's value in giving a heavy, dense fog spray.

At the Norman Knight orchard, the visitors saw the advantage of cultivating the ground under the trees, and heard a talk by Prof. C. L. Kuehner, Madison. Floyd Martin and Ralph Holmes tied for first place in the identification contest, while in the apple judging contest, George Ruder won first place.

Dr. E. E. Wilson discussed the spray methods in the Door county cherry orchard tour.

Dr. Wilson works with the horticultural department of the state college of agriculture in Madison, in the winter time, and is in charge of orchard disease control of all the Door county commercial orchards in the summer.

Boy Tells of Increase

Floyd Martin told how last year he netted $10 off his orchard and how this year he has already sold $100 worth of fruit, with but a third of the crop picked, when the tour halted at his orchard. He gave an interesting talk on marketing methods and the proper containers to use.

The big need of the "Grass Floor orchard is application of complete fertilizers, to include phosphate and potash, if bigger yields and better quality fruit are to be secured, A. N. Howalt advised the tour guests, when the group stopped at the Holmes orchard. Mr. Howalt discussed pruning and suggested application of 4 to 7 pounds of ammonium sulphate or nitrate of soda for proper results, to return fertility to a worn out orchard.

At the George Ruder orchard, the owner displayed his dusting machine and his vegetable storage cellar, and took the visitors through his raspberry and celery plots.

—*Waupaca Post.*

INDEX TO ADVERTISERS

	Page
Bahr Nursery	62
Berg, John	62
Chequamegon Flower Gardens	57
Cumberland Fruit Package Co.	61
Fitchett Dahlia Gardens	34
Gelbke, C. A. & Sons	62
F. R. Gifford Co.	63
J. F. Hauser	55
Kellogg's Nursery	62
McLaughlin Gormley King Co.	64
North Star Nurseries	61
Palmiter & Son	55
Rasmussen's Fruit Farm & Nurseries	64
Sisson's Peonies	64
Stonecrest Gardens	62
The Swartz Nurseries	63
W. W. Thompson Sons	34
W. A. Toole	53
White Elm Nursery	63

WISCONSIN'S FAMILY TREE

1634—Discovered by Nicolet.
1671—Annexed to the Kingdom of France.
1763—Transferred to Great Britain.
1783—Ceded to the United States.
1784—Virginia's claim surrendered to United States.
1785—Massachusett's claim surrendered to United States.
1786—Connecticut's claim surrendered to United States.
1787—Incorporated in the Northwest Territory.
1800—Given to Indiana Territory.
1809—Annexed to Illinois Territory.
1818—Attached to Michigan Territory.
1836—Set off as an Independent Territory.
1848—Entered Union as a State.

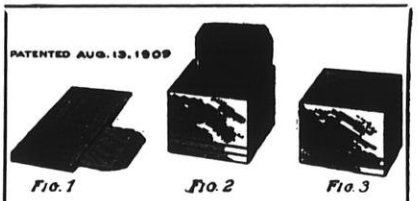


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

THE NORTH STAR NURSERY COMPANY

PARDEEVILLE, WISCONSIN

Growers of

Dependable Nursery Stock for Wisconsin Planters

Write for our illustrated catalogue of hardy stock

Our Motto

Quality - Service - Satisfaction

Landscape Contractors
Builders of Beauty

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

SHRUBS — ORNAMENTALS — ASPARAGUS Plants. West Park Nursery, C. A. Gelbke and Sons, Appleton, Wis.

NURSERY STOCK

FOR SALE: NURSERY STOCK. FRUIT and ornamental trees. Shrubs and perennials. Send for list. Bahr Nursery, Manitowoc, Wis.

CRANBERRY CROP PROSPECTS GOOD

Wisconsin Rapids Tribune: Wisconsin this year has one of the finest crops of cranberries in its history and also one of the highest quality crops in the United States. This was the context of the talk given this morning at Nekoosa to the members of the Wisconsin Cranberry Sales company by A. U. Chaney, New York City, national sales manager of the company. Continuing Mr. Chaney said that the prospects are that the prices will be better than ever, judging from the quality berry expected this fall. Excellent growing conditions have favored the development of the berry. There has been very little frost or fungus pest to disturb the growth.

Mr. Chaney said that Wisconsin this year, judging from reports received, would harvest 50,000 barrels of cranberries as compared to 25,000 barrels in 1927 and 80,000 barrels in 1926. In contrast to these figures Massachusetts this year would harvest 310,000 barrels as compared to 360,000 last year and 450,000 in 1926. New Jersey will harvest 125,000 barrels this year as compared to 75,000 barrels last year and 215,000 barrels in 1926.

—*Antigo Journal.*

ORCHARD TOURS HELD FOR FARM ORCHARDISTS

COUNTY Agents J. F. Thomas of Waukesha County, and R. B. Pallett of Milwaukee County, also A. N. Horvalt Agriculture teacher at Waupaca high school held orchard tours for their orchardists during September. The purpose of the tours were to give sprayring orchardists an opportunity to compare the results of demonstration work in pruning, spraying and fertilization work and to give other farmers an opportunity to see what can be accomplished in old orchards when they get the proper care.

In Waukesha County stops were made at the Dickfuss, O'Connell, Moore and Schwartz Bros. farms.

In Milwaukee County at Wm. Basse, Goelzer Bros., O. Demien and Schreiber Bros., and in Waupaca County at Pennbecker, Knight, Martin and Holmes orchards. Some very fine spraying work was observed on all of the tours. Exceptionally good work in orchard fertilization was done in some of the Milwaukee County orchards. Two of the Waukesha County orchards showed excellent examples of rejuvenation work on old trees.

6 Peony Roots for $3.00

12 Fine Peony Roots, $5.00

100 Choice Gladiolus Bulbs $2.00
10 each of 10 kinds labeled,
FOB by Express. October and November delivery

Send For Catalog

Stonecrest Gardens
Eau Claire, Wis.

12 fine Peony Roots, all labeled. 8 different varieties for $5.00. Will include 1 Sarah Bernhardt.
3 Peony Roots not labeled for $1.00.
I have no plants rated under 7, so you can depend on getting good value for your money. All plants sent postpaid as soon after Sept. 15 as possible.

Send for price list.

JOHN BERG, Ashland, Wis.

Peonies

FOR FALL PLANTING.
Any $6.00 Collection for $5.00
Send for Our Peony List

IRIS ASSORTED COLORS
$2.00 per Dozen Postpaid

Kellogg's Nursery

Box 77 **Janesville, Wis.**

SHALL WE KILL BIRDS

MR. CARL SCHWARZ of Richfield writes that birds have practically ruined his cherry crop for several years. He wants to know if the Conservation Commission can not be given the right to issue a permit to kill birds taking the fruit.

Mr. L. B. Nagler, Conservation Director, answers this question as follows:

"At the present time the Conservation office has no right to issue permits to kill birds and legislation is required to cover this point. As you know, most birds are protected by both the state and federal statutes and I believe it would be a serious mistake to give permits for anyone to destroy birds."

In answer to this Mr. Schwarz writes as follows:

"I am aware that at present the Conservation Commission can not issue a permit for killing the birds so disastrous to the the cherry crop but expected that this Commission should bring this matter before the Legislature and do all in its power to require the right to issue such permits where sufficient proof is given that the killing of the birds is a necessity.

I in no way advocate the senseless killing of birds but wish to have the right for doing so during the time my cherries are in process of ripening, say from June the 20th to July 4th.

If the Conservation office does not strive to get the right to issue such permits, the Horticultural Society should take the matter up and petition the Legislature to enable the Conservation office to do so."

Mr. Schwarz brings up a question on which there will be some difference of opinion.

We would like to hear from our members as to what they think of this matter.

Mention Wisconsin Horticulture when writing to advertisers.

EVERBEARING RASPBERRIES DO WELL

Enclosed please find $1.00 for my dues. I am greatly pleased with Wisconsin Horticulture. I have always liked it, but you are surely accomplishing much with it.

I have seen several criticisms of St. Regis Everbearing raspberries and I want to tell our experience with them. We bought 1 dozen roots several years ago and our early experience with them was much like others—a very poor yield of inferior berries and dissatisfaction generally, but as I am slow to give up, we kept our bushes and found that in wet autumns with late freezes, that the berries were very good and quite plentiful. Two years ago we fertilized the bushes quite heavily with hen manure and the results were very satisfactory and have continued more and more so. There was a heavy crop last year of large fine berries in June and in October also quite good results. The berries are wonderfully large and fine this year, especially in September.

It seems to me that city people might derive much pleasure and profit from a few bushes of St. Regis if they fertilize and irrigate the bushes.

Respectfully
MRS. A. C. HOLLISTER,
Mukwonago, Wis.

Orchard Harvesting Supplies

Pointed Ladders
Step Ladders
Picking Bags
Picking Baskets
Wire Fruit Pickers

F. R. Gifford Co.
2201 University Ave. Madison, Wis.

White Elm Nursery Co.
Hartland, Wisconsin
General Line of
Ornamentals and Fruits

Member
Kenosha Florists and Nurserymen's Association
Assoc. Member
Illinois Nurserymen's Association

The Swartz Nurseries
GROWERS OF
Shade, Ornamental & Evergreen Trees
Shrubs, Vines and Roses
Park, Cemetery, and Golf Ground Planting
Landscape Architects
KENOSHA, WISCONSIN
Phone 2F4

Dependable—

That is a quality we constantly strive for; we want every customer to feel confident that his orders will be cared for in a dependable manner, and that the plants he receives will be of highest quality and absolutely true to name and description.

We grow a complete line of fruit and shade trees, ornamental shrubs, perennials, climbing vines, berry plants, etc. consisting of the best varieties.

—Catalog on Request—

Visitors Always Welcome

RASMUSSEN'S

FRUIT FARM AND NURSERIES

Oshkosh **Wisconsin**

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

"How Can I SAFELY Kill Plant Insects?"

"How can I really eliminate this ever-present menace without injury to my flowers and without the danger of poisonous compounds?" The answer is

M·G·K QUALITY EVER GREEN NON-POISONOUS INSECTICIDE

Spray with

As demonstrated by some of the largest and most successful growers in the country. It has proved effective against cut-worms, aphis, leaf hoppers, leaf rollers, mealy bugs, thrips, aster beetles, rose chafer . . . in fact, most plant insects, both of the sucking and chewing variety.

It is non-poisonous to humans, animals and birds; harmless to tender plants; easy and pleasant to use; easy to mix; and economical . . . a 6 oz. bottle (for $1.00) makes 10 gallons of effective spray against Leaf Rollers.

Try It On Our Money-Back Guarantee

Sold by seed stores and florist supply houses. If your dealer's supply hasn't arrived yet, send $1.00 for 6 oz. bottle, descriptive circular, and spray chart.

McLaughlin Gormley King Co. **1722 S. E. Fifth St., Minneapolis, Minn.**

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

ANNUAL CONVENTION NUMBER
In This Issue
CONVENTION PROGRAM AND PREMIUM LIST

Vol. XIX NOVEMBER, 1928 No. 3

We invite you to come to Janesville now and select from our garden the Dahlias you wish for next year. They will be sent - - named and carefully packed - - in the spring.

Why not send some to that friend's garden?

Fitchett Dahlia Gardens

735 E. Milton Ave., Janesville, Wisconsin

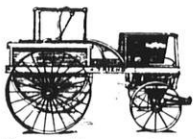
TABLE OF CONTENTS

	Page
News Items From Our Fruit Growers	67
The Vicious Circle	68
Mice and Rabbits in the Orchard	68
The Story of the Thrifty Farmer	69
Items from North Dakota	70
House Plants	71
Langlade County Wins Potato Show	73
Can the Children Have a Garden	75
Convention Program	77
Convention Premium List	79
Index for Wisconsin Horticulture	80
Notes by the Editor	80
Yes! Wisconsin Has Apples	80
About the Home and Garden	82
Rhododendron in Wisconsin	83
Garden Club Activities	84
Garden Club Federations	84
Program Suggestions for Garden Clubs	84
News From Upper Wisconsin-Michigan Florists	87
A Nature Fair	89
Can We Save Our White Pines	90
Another Blister Rust Infection Found	90
Bob White Checks Potato Beetle	92
Making Satisfied Customers	94

"FRIEND" SPRAYERS

Are Made Large, Medium, Small.
For All Kinds of Spraying
Fruits and Vegetables

Used the World Over



Write for information
"FRIEND" MFG. CO.
GASPORT, N. Y.

Low down short turn
Cut under style for orchards
Many sizes

59th
Annual Convention

Wisconsin State Horticultural Society

Milwaukee Public Museum and Library
December 5-6-7, 1928

Special Programs
for
Fruit Growers, Garden Clubs
Vegetable Growers

See Program and Premium List
in this issue

Everyone Welcome

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS
President
J. E. Leverich, Sparta
Vice-President
C. J. Telfer, Green Bay
Secretary
H. J. Rahmlow, Madison

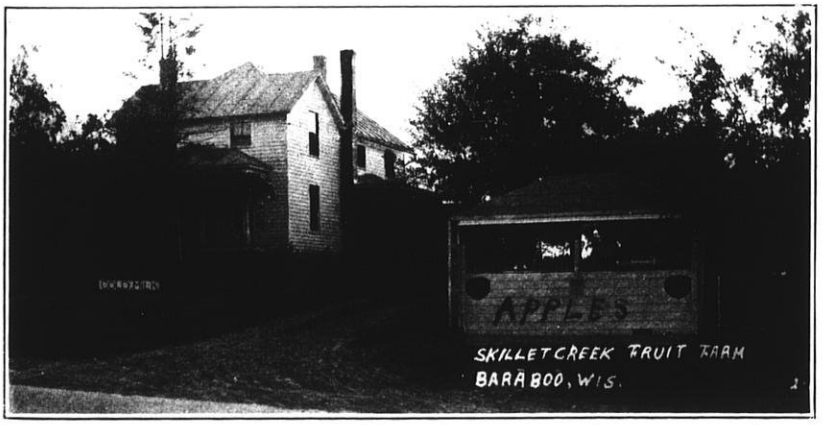
News Items From Our Fruit Growers

Best Varieties, Marketing Problems and Rodent Control Discussed

C. J. TELFER of Green Bay, Manager of the large orchard of the Larson Canning Company, writes that this year's crop is 15% larger than in 1927, which was 50% over 1926. The trees however are young and the yield has been on the increase for the last five years.

There is very little insect injury this year. Some scab on Dudley and McIntosh. Some varieties were sprayed five and six times and part of the orchard was dusted twice in addition to the above.

Evidently Green Bay is a good market location for Mr. Telfer reports that they have had no marketing difficulties up to the present time.



Direct marketing helps Mr. Irish to solve one of his most serious problems

In his opinion there are only two best varieties, the Wealthy and McIntosh. Nearly all the apples sold at a fairly good price.

Red varieties sell the best in his locality and the Wagner is the poorest variety they have tried.

To protect their trees against rodents, they use screen on the smaller trees, with poison grain boxes, described in more detail in another article, for the entire orchard.

GRANT COUNTY CROP GOOD

MR. RALPH IRWIN of Lancaster reports that the apple crop in his community is several times larger than last year and well above the five year average.

His best sellers are McIntosh, Snow and Greening. His community buys very few apples before the season of the McIntosh and Snow. The early varieties such as Duchess are not profitable. Delicious sells for a better price but it is too expensive to produce. The tree also lacks vigor and is a poor producer in Mr. Irwin's opinion. He says further that Wealthy is another early variety that ripens before the local market is ready for them and must be shipped or wasted.

Any RED apple of even moderate quality sells in the local market.

Trouble With Scab

Relative to disease Mr. Irwin says, "We have had no fireblight and less than 1% of worms, but there is altogether too much loss from *late* scab infection. My last spray was put on the 9th or 10th of August. I omitted this spray on the Wealthy and they were free from scab, commercially speaking. The Snows in

the adjoining row thoroughly sprayed had a large percentage of late scab infection. Will somebody please explain?"

In regard to marketing Mr. Irwin says, "If it were not for the marketing, the growing of apples would be fun. However, patience and perseverence wins here as elsewhere."

To protect the trees against rodents Mr. Irwin says "We mow the grass and weeds away from the trunks of the trees and mound the dirt up against them. This does not always protect them against mice. Each tree should have a collar of wire cloth. Rabbits can be shot or trapped and eaten, or fed on the trimmings from pruning operations. They like apple buds better than bark."

MARKETING PROBLEM AT BARABOO

MR. L. B. IRISH of Baraboo says that the condition of his crop is 50% better than last year and 33% of an average crop.

He lists his best selling varieties as follows: Early; Lowland Raspberry and Saxonion. Fall; Wealthy, McIntosh and Snow. Late or winter; Delicious, Gem City, Greening, Jonathan and Tolman.

Mr. Irish says that McIntosh in his locality fails to set fruit so often that it is not dependable. The Wealthy comes on when the market is usually flooded with other apples.

This season he applied the following sprays; 1. Prepink. 2. Pink. 3. Calyx. 4. Two weeks after Calyx spray. 5. For second brood of codling moth. He thinks he should have put on another spray between the 4th and 5th because there was considerable scab on some varieties which might have been controlled by another spray. Worms he says were well under control.

Marketing Problem

Mr. Irish says that the great difficulty is in getting products more direct to the consumer. He runs a very successful roadside stand as shown in the cut. Direct marketing of good quality fruit at reasonable prices so that the consumer can afford to buy in quantity is solving the difficulty. High prices and poor ungraded fruit curtails consumption and causes hardship to everyone. He complains that local merchants are already shipping in apples when there are quantities of the best well graded cooking and eating apples still in the growers hands.

Rodent Control

Mr. Irish says he has always wrapped his trees with tar paper but thinks that in starting a new orchard it would pay to use the permanent wire screen.

THE VICIOUS CIRCLE

WE HAVE a letter from O. J. Kolden of Taylor, Jackson County, in which he says, "The farmers don't want to spray the apple trees because they can't sell the fruit. The merchants don't want to buy the apples because they are wormy and scabby and can ship in better stock from the outside."

Here we have the same vicious circle that has kept many a community from going ahead. Each apple grower from the outside can ship in good clean fruit and make a profit and surely local farmers should be able to compete with them.

The sprayring is the logical remedy. The problem is how to get farmers interested in the sprayring. Mr. Kolden says further, "If we induce the farmer to spray they only do it once in a season. I have been preaching every winter while pruning for them to spray three or four times but it's no use."

He further states that oyster shell scale and insects are very serious and the trees are going down fast.

How can we prove to the farmer that the reason they find no profit in growing apples is only because they are not producing apples but simply culls that hardly look like apples. These culls disgust the buying public and unless they can get better fruit shipped in they won't use any apples at all.

Since Jackson County has no County Agent we suggest they ask for a good Farmers' Institute speaker on orchard problems and an effort be made to organize sprayrings.

Professor Kuehner has done great work along this line and we hope Jackson County farmers will profit thereby.

MICE AND RABBITS IN THE ORCHARDS

WISCONSIN fruit growers have different methods of controlling mice and rabbits and all admit that it is a serious problem.

Mr. C. J. Telfer of Green Bay, Vice-president of the Horticultural Society, and manager of the large orchard of the Larson Canning Company, has had a good deal of experience and uses the following method for the control of mice.

He says, "We have always taken all grass and weeds away from the trees, forming a circle from three to four feet in diameter. Last winter we used bait boxes with corn and barley treated with strychnine.

The boxes were open on both ends, the tops were about three inches longer than the sides or bottoms which made a projection of an inch and a half on either end, the openings were 1¼ inches in height and three to four inches in width.

If I were to make boxes again they would have an opening at one end only, which would allow the grain to be placed well away from the opening so no animal could get the poison except the mice.

This year I am not going to take the grass away but will use

(Continued on page 95)

The Story of The Thrifty Farmer

He Finally Found True Happiness

ONCE upon a time there lived a farmer who was very thrifty. He had a large barn filled with cattle and horses, and his broad acres were productive and well tilled. He worked very hard from early morning until late at night and his wife and children worked with him.

But his home was not pleasant to look upon. It was an old house and the paint had almost worn off. In the front yard this thrifty farmer grew some vegetables for it was nonsense to let the land be idle and he had no time for such foolishness as lawn mowing. He planted a few apple trees near the house and they provided shade for the poultry and the fruit which fell was relished by the hogs.

And the farmer prospered and his bank account grew for he did not need to spend his money. His good wife was usually very tired and did not care for good clothes so they neither had to entertain guests nor spend money for amusements.

A nursery salesman visited the farmer's wife and she desired much to buy some ornamental shrubbery such as bridal wreath, and lilacs to brighten the front yard, but when her husband heard of it he grew very angry. Said he: "Should I spend my hard earned money for such foolishness? I can go into the forest and get good plants without cost. No one looks at our place anyhow. We will save our money and move to the city when our children grow up; then we can have a better place and enjoy our old age in peace and contentment."

But the heart of the farmer's wife was heavy. She noticed that their neighbor had a pretty lawn with flowers and shrubbery and that of a beautiful summer evening the children of the neighboring farmers would play there. Friends also came and made merry, and the neighbor's wife was bright of eye and cheerful.

One day she spoke to her husband thus: "I am ashamed of our home and our yard. People do not look this way and our friends do not come to see us. Our children must play alone or go to the neighbors, for other children do not come here. Would it not be better to have a few nice things and be happy on the farm, even if we have a little less money and must stay here a few years longer?"

But the farmer would not hear of it and said. "I am happy in my work. Only the thriftless want unnecessary luxuries."

What is true happiness? Is it found in either of the two extremes—living at a fast pace with all the pleasure our modern life offers, or that other, slavery to accumulate a fortune for future enjoyment which oft times never comes.

In this fairy tale the farmer finds happiness where many others have found it.

And it came to pass that as the farmer's children grew older they also became dissatisfied. They were ashamed of their home and unhappy in the drudgery of their work, for the farmer believed not in "new fangled ideas" or such foolishness as Boys' and Girls' Clubs. Soon the sons and daughters left the farm for the city, for they could find enjoyment there and easier work.

Thereupon the farmer sold his farm and also went to the city to live, for he had accomplished his purpose and had saved enough money to live the rest of his days in security.

But he was not happy in the city, for he could not be idle, and time hung heavily upon his hands. Whereupon of an evening he went to visit his old neighbor on the farm, and found him and his family enjoying a pleasant hour before sundown under a shady tree beside the house, for the day had been warm.

"I am glad to see you," greeted the former neighbor. "How do you find life in the city?"

"Not very well," was the reply. "My health is not as good as it was, and I am not happy in trying to live like city folks."

"It is as I expected, friend," said the neighbor. "Your heart is in the growing of living things and idleness does not mean happiness to such as you. That is why you are discontented and it is effecting your health. Look about you in the city and you will find living there many widows of retired farmers."

The good neighbor's wife asked the retired farmer to look at the many beautiful flowers and shrubs about the home. She explained how small evergreens and shrubs were planted about the foundation of the house, and at the proper place on the edge of the lawn. How tulips and crocus gave early spring beauty and made them all happy after the drabness of winter. She told how iris and peonies beautified the edge of the lawn in early summer and attracted the gaze of the passerby, giving others pleasure as well as themselves. Then she described the different varieties of annuals and perennials and how they provided beauty until late in the fall.

When she had finished, her husband spoke to the retired farmer thus: "My friend, you can now see why we are happy here, why our children love their home and are contented. We will stay here as long as we are able to work for we are not

slaves to the farm. We have many labor saving devices to lighten our labors, and our work is not too hard. We are among our friends and that, after all, constitutes true happiness in life."

Lo and behold, the retired farmer returned to his city home with a cheerful heart. "At last", said he, "I am convinced of my error, and I will change my ways that I may live long and be contented."

He thereupon sold his city house and bought himself a pleasant place near the town where he worked happily in his garden and among his flowers.

Soon those who passed by looked long at his cool green lawn dotted with trees, his well kept garden and beautiful flowers, and they could be heard to say: "That man must be truly happy."

As the years passed by the children and grandchildren of the old farmer spent many happy hours at his home, for they found there a place to rest from their labors and enjoy their hours of leisure.

And the old farmer was indeed happy, for verily I say unto you, he that makes others happy is himself happy.

PLAN PROTEST FOR HIGHER FRUIT RATE

Wisconsin fruit shippers are protesting the proposal of Wisconsin railroads to change the commodity freight rate on fruit from Chicago to Wisconsin and between points within the state.

At present a mixed car of fruit is shipped under a low commodity rate. A change would make third class effective, bringing an increase of about 20 per cent.

The rate matter came up before the Wisconsin sub-committee meeting of the Western Carriers' association here last week. Further hearings are to be held with the sub-committee, the tariff making representative association of all Wisconsin carriers—Milwaukee Journal.

INTERESTING ITEMS FROM NORTH DAKOTA HORTICULTURAL SOCIETY

By SECRETARY YEAGER

As a result of experiments at the N. D. A. C. this year with various kinds of pots, the common clay pot proved as good as any. Peat pots did practically as well, while pressed paper pots were decidedly inferior.

We note some statistics recently which seem to show that the American people are now eating less bread, corn and beef than formerly. They are making it up by consuming larger amounts of pork, sugar, fruit and vegetables. Certainly, so far as the increase in the use of fruit and vegetables is concerned, it means a better diet.

As a usual thing we are obliged to discourage the introduction of a new variety because it is a very rare seedling which is better than *all* the old varieties even in one respect, and unless a new variety is superior to all old ones or at least decidedly different than all old ones its introduction is not recommended.

Onion growers in Illinois are said to be controlling onion maggot by spraying three to five times during the summer with Bordeaux mixture to which has been added a lubricating oil emulsion at the rate of 1½ gallons to each 50 gallons of the Bordeaux spray.

Are parsnips poison if eaten now? No, parsnips dug now are perfectly wholesome but their quality is much better if they have thoroughly matured and have been stored for a while.

In order to keep apples for the longest time possible in good condition the temperature should be kept between 35 and 40 degrees with a reasonably moist atmosphere. A good root cellar if opened during our cool fall nights and closed during the daytime can be regulated so as to give near the ideal storage conditions. Wrapping also helps.

One member seemed anxious about her asparagus fern, some of the leaves of which are turning yellow. We advised that the plant should be repotted with fresh soil this time of the year and that one need not worry too much about some of the leaves turning yellow. Leaves become mature and must die some time so that a few old leaves on a plant are to be expected.

WIN HORTICULTURAL SOCIETY PRIZE

THE Marathon County Boys' and Girls' Demonstration team which chose for their subject "Beautifying the Home Grounds" won first prize in Marathon County in the demonstration team contest. The team consisted of Esther Spencer and Merle Binning of Unity, Wisconsin. Dennis Gillis demonstrated insect and disease control and won second prize.

Last spring the State Horticultural Society announced that in any County in which there were two or more teams demonstrating on any horticultural subject the Society would give to the winning team a first prize of $10 and a second prize of $5. The magazine, Wisconsin Horticulture, would also be sent to members who would do meritorious work in the County and such premiums were won by Irma Dittmar of Wausau, Florence Becker of Rothschild and Eulalia Abel of Dancy, all of Marathon County. Mr. McAleavy County Club Agent is in charge of this work. This is the second County claiming the Horticultural Society premiums Milwaukee County being the first.

House Plants

A Few Essentials For Success

(Continued from October issue)

By JAMES G. MOORE

Drainage Is All Important

The hole in the bottom of a flower pot did not get there by accident but was put there to provide a ready escape for excess moisture. One should make every effort to preserve its function rather than cork it up as is sometimes done. If you are afraid that the soil will drop out, put a piece of broken pot over the hole, so that it arches away from the hole.

In small pots, no other drainage is needed. Florists do not agree as to how small a pot demands drainage, but as the home florist will ordinarily take precautions against the soil washing from the drainage opening, he may just as well make sure by supplying drainage even though it may not be absolutely necessary. In a four inch pot, three or four moderate sized pieces of broken pot will be sufficient. As the size of the pot increases, the amount of drainage should increase. In ten or twelve inch pots two or three inches of drainage is not excessive. There is, however, no definite rule regarding the material to use, its amount, or just how it shall be put in. The important thing is to provide a sufficient quantity of porous material, so arranged as to permit the ready escape of excess moisture.

FIG. 12—REPOT OLD AND OVERSIZED PLANTS
Left—Old plant as it came from the pot.
Center—Root and top pruned, ready for repotting.
Right—Repotted. In a few weeks it will be a very satisfactory plant.

FIG. 2—PROVIDE DRAINAGE SPACE FOR POTS IN JARDINIERS
The pot is set on small blocks. The excess water is removed frequently

The following is merely suggestive of one way of providing drainage for a six inch pot. Place an inverted piece of broken pot over the drainage opening. Next, put in several sizable pieces of broken pot so as to provide openings between them, or three-fourths to one inch of cinders one-fourth to one-half inch in diameter. To prevent the soil washing down through the drainage openings, a thin layer of sphagnum moss, excelsior, or straw may be put over the drainage material. Frequently this layer is omitted.

Potting Operations Are Simple

In setting the plant, the coarser soil may be placed next to the drainage material. Put in enough to bring the plant to the desired height; set the plant with the stem in the center of the pot; and put in the finer soil until it comes half way between the top and bottom of the rim at the top of the pot. Press the soil down firmly and then, taking hold of the pot with both hands, strike the bottom squarely two or three times against the potting bench or table to settle the soil.

A common error is to fill the pot too full. This interferes with convenient watering and frequently results in the plant not getting enough water. The surface of the soil after settling should be just a little above the bottom of the rim at the top of the pot.

While it is important that the roots should have good contact with the soil, too much firming is about as bad as too little. This is particularly true if the soil is somewhat heavy. Firming does not mean packing. One must use discretion in the matter if best results are to be had.

"Pot-bound" Plants Need Care

After a time the plant has developed until the roots form a thick covering over the earth ball. Unless attention is given at this time, the roots soon begin to turn brown and decay. When in this condition, the plant is said to be "pot-bound." There are three measures which may be taken to avoid the bad effects due to a plant becoming pot-bound. Which one is used will be determined largely by the conditions in the particular case.

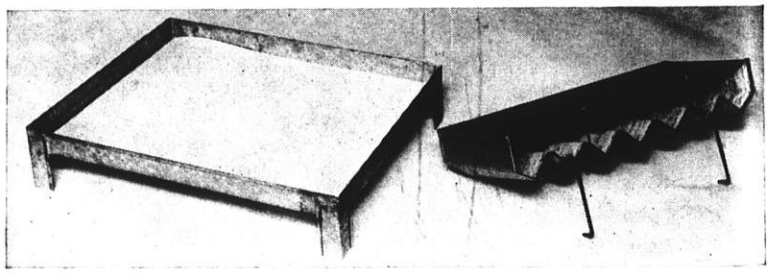
If one desires the plant to continue making vigorous vegetative growth and to increase materially in size, it should be shifted. This means transferring the plant to a larger pot without much, if any, disturbance or reduction of the root system.

A pot, usually two sizes larger than the one occupied by the plant is used. Place drainage and a small amount of soil in the bottom. Slip the plant out of the pot. This is best accomplished by placing the hand over the surface of the earth ball, with the stem of the plant between the fingers. Invert the pot, and rap the edge firmly on the edge of the bench or table. The plant should slip out of the pot with the earth ball intact. The soil should be moderately moist to get best results. If either dry or wet, it will stick to the sides of the pot. It is not good practice to loosen the plant, as is sometimes done, by running a kitchen knife between

(Continued on page 95)

The roots should be examined occasionally. Left: Removing the earth ball by striking edge of pot on corner of bench

Above: Time to shift. Pot bound, brown and worthless roots on left. White, vigorous roots on right, ready to shift



TRY TO KEEP THE AIR MORE MOIST

Left—Evaporating pan to be set over a register.
Right—Humidifier to be hung on radiotor.

Langlade County Wins Potato Show

Inspector John Brann Gives Interesting Field Notes

THE 17th Annual Convention and State Potato Show held at Rice Lake November 22-26 was decidedly the best ever held. The large pavilion in which the show was held gave ample space for the County booths, individual displays, and commercial exhibits, as well as the Northern Wisconsin Grain Show held in connection with it.

Prizes were awarded as follows:

	Scores
Langlade	99.1
Barron	98.4
Forest	97.4
Vilas	97.1
Price	96.5
Oneida	96.3
Washburn	93.8
Sawyer	93.5
Marinette	88.2

4 H Clubs

1st, Marinette; 2nd, Langlade; 3rd, Washburn and Sawyer; 4th, Milwaukee.

Varieties

Rurals: 1. Charles Schotte, Antigo; 2. Gus Kringle, Rice Lake; 3. A. T. Johnson, Angus.

Green Mountains

1. Gordon Westbrook, Bradley; 2. R. Meyers, Tripoli; 3. L. O. Larson, Rhinelander.

Russet Rurals

1. Clifford Sorenson, Marinette; 2. L. S. Jacobson, Mole Lake; 3. John Nettleton, Marinette.

King: 1. Wm. Bray Earl; 2. Melvin Bray Earl; 3. Pine Lake State Farm, Rhinelander.

Triumph: 1. J. W. Smith, Bryant; 2. Shirley Morgan, Antigo; 3. P. W. Krier, Antigo.

Irish Cobblers: 1. Felix Alderton, Laona; 2. James Stark, Bryant; 3. Chas. Schotte, Antigo.

Burbank: 1. Ray Brown, Shell Lake; 2. Pete Peterson, Gurney; 3. Mrs. Laura Brown, Shell Lake.

Early Ohio: 1. Henry Antonissen, Niagara; 2. C. H. Johnson, Conover; 3. Herman Schoeneck, Enterprise.

The convention program was unusually good. The marketing and disease problems of the growers were the chief points under discussion. Growers were advised to ship only U. S. No. 1 stock, for the market is so weak that poor quality spuds will not bring a profit above shipping costs.

Russell Talks

Dean Russell of the College of Agriculture gave the keynote talk, on Thursday afternoon. Barron County, he said, has the second highest yield per acre, the highest being Douglas County with only 1/10 of the acreage of Barron. This high yield is due to the good soils of the County combined with the diversified type of farming. Barron is typically a dairy County, which keeps up the humus and fertility of the soil to the highest degree.

The fluctuation of potato prices was also mentioned. This is due to weather conditions about which, as Mark Twain wrote. "There is a great deal being said but very little being done." This year there is a crop of 466 million bushel, with a probable consumption of about 400 million bushel. Overplanting of potato acreage, together with good growing weather is responsible for the crop. In a few years no doubt the acreage will be cut and the weather cut the yield in addition with the result that prices will be high. This problem is a difficult one to solve.

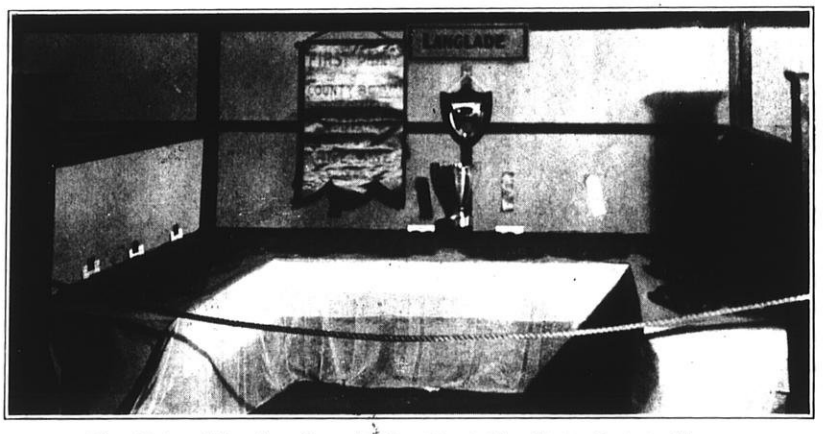
IN THE FIELD WITH THE INSPECTOR

By J. W. BRANN

THE potato is readily affected by variations in seasonal conditions. No one knows this better than the inspector of certified seed. Monotony, did you say? Not so in this work. No two seasons are identical in climate conditions. Dame Nature has a habit of stepping in and quite generally overrules the well laid plans of man. One season may present a condition of hot, dry weather accompanied by epidemics of leaf hoppers and potato bugs, and a resulting short crop. An entirely different picture may present itself the following season. Conditions may be entirely reversed.

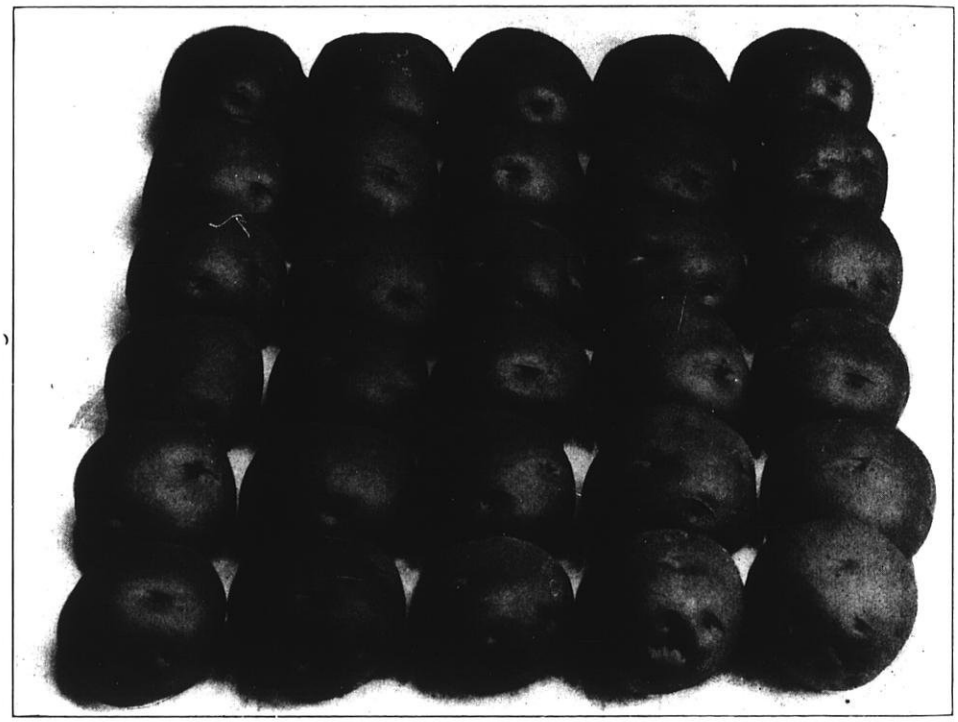
No, the work does not get monotonous. Just about the time we begin to feel the drag that goes with looking over field after field or bin after bin, some new condition pops up that demands a readjustment of plans and maneuvers.

And then there's the human side of the picture. There's no monotony in contacts with the Wisconsin seed potato grower. Like the seasons, no two growers are alike. The Wis-



The Prize Winning County Booth at the State Potato Show

consin seed potato grower is always alert for suggestions on improving his crop. And each one generally has problems peculiar to his own domain. He jumps the inspector for information. That's as it should be. There's no monotony for the inspector in this. If there is spice in variety, the inspector surely has all-spice.



A winning sample of Triumphs at the State Potato Show. Few people realize the amount of painstaking labor and time necessary for putting up an exhibit of potatoes such as are shown at the annual state potato show. Notice the uniformity of type, shape and size.

Big Yields

The season of 1928 was characterized by unusually satisfactory growing conditions. The proper combination of moisture, temperature and fertility resulted in record acre yields of certified stock. The writer saw in the Antigo district a yield of 450 bushel per acre of Irish Cobbler potatoes in a twelve acre field. A field of fifty acres in extent in Vilas County produced an average of 400 bushel of Triumphs per acre. Record yields of 450 bushel per acre of Green Mountains were seen in Oneida County. Reports from Barron County are that the Rural New Yorker is making new records in yield.

The quality of the early maturing varieties, Triumphs and Cobblers, is in general, very satisfactory. Nearly 200,000 bushel of these early varieties will be produced. Many fine lots of Green Mountains and Rural New Yorkers have also been inspected. In some sections, however, late blight rot has made serious inroads in these late varieties.

Rejections are in order when too much rot is present. In cases of medium infection, the stock is given a second inspection after it is reconditioned by the grower. This means that the grower accepts an added responsibility in careful sorting and grading. This sorting, supplemented by a rigid shipping point examination by the Department of Markets Inspector, will make it possible to present to the trade very acceptable stock of the Green Mountain and Rural varieties.

Amount of Certified Seed

Accurate figures as to the total amount of certified seed produced cannot be given since the inspection work has not yet been completed. The estimated production of Green Mountain and Rurals is 100,000 bushel.

Favorable growing conditions extending into late fall resulted in the production of some immature stock in sections where late planting is practiced. While this is not undesirable from the standpoint of productiveness in seed, growers should exercise care in handling such stock to prevent excessive bruising. The grower should bear in mind that the buyer bases his opinion of the stock which he receives on the general appearance to a large extent.

The Wisconsin growers of seed potatoes will have to offer to the trade upwards of 300,000 bushel of very acceptable stock of Green Mountain, Rural New

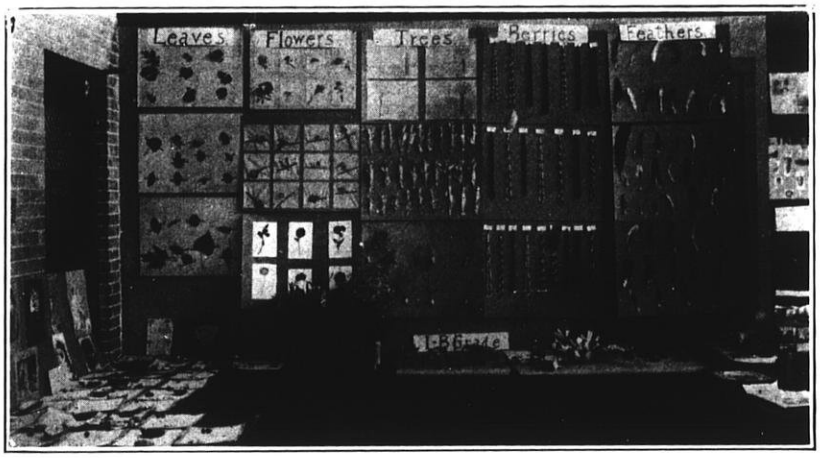
(Continued on page 93)

Can The Children Have A Garden

In Spite of Difficulties This School Has A Successful Cooperative Garden

By FLORENCE PEASLEY, Kenosha

NATURE and nurture are inseparable when considered in relationship to the highest development of childhood. In the midst of this complex, hurrying, utilitarian life, we need to find for the child some spot where he may know what quiet order means and where he will feel, as an undercurrent of spirituality, a reverence for things divine. In a little garden spot, Nature's laws must be respected; order must ensue; curiosity leads to wonder, and wonder invites reverence.



A corner of the Nature Fair Exhibit at the Grant School, Kenosha
Photo by Mrs. Sutherland

The writer of this article spent the greater portion of a day this last summer in going about the city of St. Paul observing children at work in their school garden plots. There, the provisions for obtaining vacant lots adjoining school property, providing summer supervision, buying seeds and plants and laying out the grounds, is ideal. The plots had like products arranged across the fields in orderly array and each child was encouraged to plant enough of each variety to provide at least a family meal as well as to keep his bed filled up by a succession of crops.

Not all schools have nearby gardening space available for individual plots but most school yards could provide for a small garden for experimentation and encouragement to home growing through learning how to make and care for a garden.

During a five year period we tried this cooperative gardening plan with a group of children in the kindergarten and primary grades. We were housed in some temporary, portable buildings upon an acre of ground which was fenced in upon the east, north and west sides. The first spring we started spading up ground along the west fence where the soil really seemed to be fit for gardening. An obliging farmer watching our efforts brought his plow one morning and plowed up approximately three square rods for us.

We spent several days getting rid of grubs and cutworms with which this old sod seemed to be infected. The children had been told about the value of birds in destroying harmful bugs and worms and, as they watched the myriads of ants lugging off chopped up grubs, discussed means of inviting the birds to help us.

We could not teach everything at once—especially insect poisons, so we followed the children's lead by walking countrywards into byways and shaded lanes where we might get some berry-shrubs to entice the birds. We brought back chokecherry, elderberry and wild gooseberry bushes and many wild flower plants. The shrubs were set out close to the fence and lilac, wild rose and bittersweet vines were added within the row. The teacher knew that she must provide shade for the dainty hepatica, bloodroot, jack-in-the-pulpit, anemone, wild columbine, trillium and woodsy ferns. These last forest treasures we tucked into the soil all wrapped about their roots with moss, and the children brought little wagonloads of black dirt to pack about them.

The children also set out daffodils, iris and narcissus among the wild flowers. As we discovered them, we added to our wild flower row, violets, daisies, wild geraniums, buttercups and milkweed. The lily-of-the-valley cared little for its uprooting and blossomed well after transplanting. We continually added black dirt until our broad path was a mere dividing line from the rest of our garden. And that "rest of the garden" was just planted crazy-quilt fashion, a jumble of vegetables and flowers, according to the children's notions. But troubles were in store for us because the range-cows entered the yard at the open side at night and sadly trampled to pieces the little beds. The children soon came lugging old two-by-fours, pieces of old boards, spikes, shingle-nails, barbed wire, picture-wire and poles. At first each child was anxious to stand upon a box and

wield the beetle to pound in posts, but that fence became a real job before it was done. It kept the cattle out but never did anyone see a fence like it before.

Summer Care

We asked some older children to help look after the garden during the summer vacation, scarcely hoping for any real results except what the children had gained in knowledge of planting. What was our amazement when September brought us back to find our little patchwork garden a riot of color!

There are no flowers that love the children's help like California poppies, marigolds, zinnias and bachelor's buttons. The pumpkin vines had trailed away beneath the fence and we knew that we might be certain of a few Jack-o-lanterns. The navy beans had spilled out of their pods in the summer and reseeded themselves so that we had more than enough beans to fill out bean bags. There were half-a-dozen ears of ripe popcorn, Jeanettes carrots were immense, Tony's potatoes looked thrifty and we thought that the three peanut vines might show peanuts later (if the temptation to dig them up was not too strong). We voted to give our vegetables to needy families for Thanksgiving, and we carefully hoarded flower seeds for the next year.

Well, we could scarcely wait to spade up our garden beds next spring, so of course we did some planning this time. We learned that corn and popcorn and melons and pumpkins mix, that vegetables are better when grown apart from flowers and that if we wished for more early flowers, we must set out bulbs in fall.

We managed to crowd some crocus and tulip bulbs behind that long, straight path, that walled our wild garden to the fence, and added some more black dirt and some wet leaves for protection. We covered the pansy bed with leaves and threw our cornstalks and sunflower stems over them so that the wind could not blow them away. We thought that we would like to know how carrots, beets and cabbage went to seed, since they showed no pods like peas or poppies. A kind neighbor kept one carrot, one cabbage, one parsnip and one beet for us in her cellar, so that the term biennial would mean something when these vegetables were replanted. We set out one horse-radish and one asparagus root. We hoped the cows did not like them for they had to go outside our fence. During the winter we enjoyed drawing plans of our garden and writing in what we might plant.

That second spring we spaded up all but the pansy and bachelor button plots as we wanted those plants that came up. Later, we transplanted these "baby-plants" and spaded the beds. We worked the soil over a great many times in order to kill all weed seeds and insects. The plan succeeded for these purposes but the dirt was so finely pulverized that it was extremely dry so that we had to dig trenches and lug water for sometime. We decided that we would rather pull weeds next time.

We wanted some flat corn for seed design work so we planted both red and yellow dent corn at the north end. Of course the pumpkins were there also to run into the grass. The children wanted a star and moon-shaped bed so we laid them out and sowed wild snapdragon (I hope the neighbors forgive us) and sweet alysum about the borders to set off the shapes.

In the little star bed we set out all the little plants "coming up by themselves" some geraniums, petunia plants and other odds and ends, verbenias, phlox etc. We wanted radishes and lettuce for a picnic so they were planted early, as were sweet peas. (The radishes were very wormy but we enjoyed the lettuce sandwiches. The sweet peas were a complete failure every year.)

We experimented with some "queer things" this time, such as broom corn, gourds, Job's tears and eggplant, all of which grew well. I guess we had at least one of each kind of common vegetables. We learned that cabbage, tomatoes, eggplant and peppers had to be started in hotbeds for our climate. Well, some plants were dug up and reset for someone's satisfaction many times. The teacher never looked at the garden during that "setting out time" without a sprinkling can and she seldom found those tomatoes twice in the same spot—but they grew. And the teacher stopped hoping that it would rain for a week.

That second fall when school opened we expected wonderful results and were not disappointed. The kindergarten teacher had learned how to make a delicious piccalilli and when she found tomatoes, onions, cabbage and peppers right at hand, of course, must use them. We held our breath while little hands sliced cabbage and tomatoes with sharp knives and felt better when spicy smells issued from the big kettle on the kerosene stove in the corner. That obliging neighbor stored all the little jars of piccalilli in her cellar—together with vegetables for a stew in the winter. Of course we gave her a jar of that wonderful piccalilli.

We had so many ears of corn that we wanted to give some to the obliging farmer's chickens but it looked good enough to eat for ourselves so we said, "Let's eat it then!" We had the children bring cream the next day which was "set" to sour. Then we churned it in cans by passing the cans about to be shaken. We borrowed the kind neighbor's meatchopper and roasting pan, and eggs seemed to appear by magic. We ground the corn through the food chopper

(Continued on page 92)

Convention Program

Wisconsin State Horticultural Society Annual Convention
Milwaukee Public Museum and Library
December 5-6-7, 1928

Headquarters—Republican Hotel

FRUIT GROWERS SECTION

Wednesday 10 A. M.: Tour of Milwaukee; Auspices Milwaukee Horticultural Society.
Registration.

Wednesday P. M. December 5

1:30 P. M.

General Session.
Greetings: Mayor Hoan, Milwaukee.

1:45 P. M.

Response, "The State Horticultural Society", M. B. Goff, Sturgeon Bay.

2:00 P. M.

Why Breed New Fruits: Professor W. H. Alderman, University of Minnesota.
Discussion.

3:00 P. M.

Special Session for Fruit, Small Fruit and Vegetable Growers.
Advertising, An Investment or an Expense: Prof. A. W. Hopkins, Madison.
Problems of the Small Orchardist and Fruit Growers: C. L. Kuehner, Madison.
Discussion led by Peter Swartz, Waukesha.

Wednesday Evening—Open

Thursday, December 6

9:00 A. M.

Success with Apples and Cherries: A. J. Rogers, Jr., Beulah, Michigan.
Discussion led by M. B. Goff, Sturgeon Bay.

10:00 A. M.

Our Changing Horticulture: Professor W. H. Alderman, University of Minnesota.
Discussion led by M. S. Kellogg, Janesville.

11:00 A. M.

Strawberry Problems: J. E. Leverich, Sparta.
Strawberry Varieties.
Discussion.

1:30 P. M.

General Session.
Landscape Gardening: Jens Jensen, Chicago.
Some Fallacies Concerning What The Experiment Station Can do: Professor J. G. Moore, Madison.

3:00 P. M.

Sectional Meeting.
Fruit Growing Demonstration: Milwaukee County 4 H Club Team.
When to Pick Apples. Use of Tester: C. J. Telfer, Green Bay.
Growing Raspberries.
Discussion.
Fertilizers for Fruits: C. J. Chapman, Madison.

6:30 P. M.

Banquet and Program.

Friday, December 7

8:30 A. M.

Business Meeting Wisconsin State Horticultural Society.
Election of Officers.

10:00 A. M.

Special Section for Fruit Growers.
Orchard Problems—R. H. Roberts, Madison.
Discussion led by H. W. Ullsperger, Sturgeon Bay.

11:00 A. M.

Apple Scab and Cherry Leaf Spot: J. W. Keitt, Madison.
Discussion led by D. E. Bingham, Sturgeon Bay.

1:30 P. M.

Insects in the Orchard: E. L. Chambers, State Entomologist, Madison.
Discussion.

2:30 P. M.

Apple Grading Demonstration and Review: M. A. Russell, Chicago, Federal Department.
Discussion led by A. W. Pommerening, Madison.

WISCONSIN GARDEN CLUB SECTION

Annual Convention

Wisconsin State Horticultural Society

Wednesday A. M. December 5

Wednesday A. M.: Tour of Mitchell Conservatory etc., Auspices Milwaukee Horticultural Society.
Registration.

1:30 P. M.

Attend General Session.
Greetings: Mayor Hoan, Milwaukee.

1:45 P. M.

Response, "The State Horticultural Society", M. B. Goff, Sturgeon Bay.

2:00 P. M.

Why Breed New Varieties: Professor W. H. Alderman, University of Minnesota.

3:00 P. M.

Special Section for Garden Clubs.
Symposium on Perennials: W. A. Toole, Baraboo.
V. E. Brubaker, Washburn.
Discussion led by Mrs. C. E. Strong, West Allis, and Mr. John Hauser, Bayfield.

4:00 P. M.

Among the Winnebago's: Huron H. Smith, Milwaukee.

Wednesday Evening—Open

Thursday 9:00 A. M.

Business Meeting: Discussion and Organization Wisconsin Garden Club Federation.
Miss Helen Moore, Delafield, Temporary President.

10:30 A. M.

Symposium on Roses: August Peter, Wauwatosa.
Louis Potter, Milwaukee.
Discussion led by Theodore Koch, Milwaukee.
Programs for Garden Clubs: Miss Helen Moore, Delafield, Mr. Archie Hill, Milwaukee.
Discussion.

1:30 P. M.

General Session.
The Use of Flowers in Landscape Gardening: Jens Jensen, Chicago.

2:30 P. M.

Some Fallacies Concerning what the Experiment Station Can Do: Prof. J. G. Moore, Madison.

3:00 P. M.

Special Section.
Symposium on Rock Gardens: Mrs. Arthur Jaeger, No. Milwaukee, Mrs. R. Malish, Hales Corners.
Discussion.
Question Box on Flowers conducted by Prof. J. G. Moore, Madison.

6:30 P. M.

Banquet and Program: Auspices Milwaukee Horticultural Society.
Japanese Flower Arrangement: Esther Herrick and Francis Melonig State Champion Demonstration Team.

Friday A. M.

8:30 A. M.

Business Meeting Wisconsin State Horticultural Society.
Election of Officers.

10:00 A. M.

Flowers and Where to Plant Them: Prof. Franz Aust, Madison.

10:45 A. M.

Aster Diseases: Dr. L. R. Jones, Madison.

11:30 A. M.

Making Good Flower Shows Better: Mrs. C. E. Strong, West Allis, Mrs. H. B. Hitz, Nashotah.

1:30 P. M.

Open for Tours of City: Auspices Milwaukee Horticultural Society.

VEGETABLE GROWERS SECTION

Annual Convention

Wisconsin State Horticultural Society

Wednesday P. M. December 5

1:30 P. M.

General Session.
Greetings: Mayor Hoan, Milwaukee.

1:45 P. M.

Response, "The State Horticultural Society", M. B. Goff, Sturgeon Bay.

2:00 P. M.

Why Breed New Varieties: Professor W. H. Alderman, Minnesota.

3:00 P. M.

Special Session.
Advertising, an Investment or Expense: Professor A. W. Hopkins, Madison.
Problems of the Small Orchardist.
Discussion led by Peter Swartz, Waukesha.

SPECIAL VEGETABLE GROWERS SECTION

Chairman, John Budzien, President Milwaukee Gardeners' Association.

Thursday, December 6

9:00 A. M.

Vegetable Containers and the Standard Package Law: L. C. Carey, U. S. Department of Agriculture.
Discussion.

10:00 A. M.

Round Table: 15 Minute Talks.
1. Storing Celery: Geo. Tesch, West Allis.
2. Exhibiting Vegetables: N. A. Rasmussen, Oshkosh.
3. Shall We Grow Bulbs: James Livingstone, No. Milwaukee.

Discussion.

11:00 A. M.

Labor Saving Devices on the Truck Farm.
Discussion led by John Budzien.

11:45 A. M.

Results with Fertilizers: J. M. Brown, Milwaukee.

1:30 P. M.

Attend General Session.
Landscape Gardening: Jens Jensen, Chicago.

2:30 P. M.

Some Fallacies Concerning What The Experiment Station Can Do: J. G. Moore, Madison.

3:00 P. M.

Sectional Meetings Resumed.
Control of Mosaic and Powdery Mildew: Professor Doolittle, Madison.
Vegetable Disease Investigations in Progress: Dr. J. C. Walker, Madison.
Future of the Greenhouse Vegetable Industry: John Budzien—Milwaukee.

6:30 P. M.

Banquet and Program.

SILVER TROPHIES GIVEN BY MILWAUKEE ORGANIZATIONS AND CONCERNS

THE following silver trophies have been donated for our fruit, flower and vegetable show at the convention.

Best County fruit exhibit—Silver cup by the Milwaukee Journal.

Best tray McIntosh—Silver fruit bowl by the Boston Store.

Best tray Wealthy—Silver fruit bowl by Milwaukee Kiwanis Club.

Best three trays of apples—Silver fruit bowl by Milwaukee Kiwanis Club.

Best collection vegetables — National Garden Bureau Medal.

Best collection greenhouse vegetables—Silver trophy by Milwaukee Gardeners Association.

Best exhibit "Mums"—Silver cup by Milwaukee Florist Club.

Best basket cut flowers—Silver vase by Milwaukee Horticultural Society.

All cash prizes, banners and ribbons given by the State Horticultural Society.

SPLENDID APPLE EXHIBIT AT MILWAUKEE JOURNAL FOOD SHOW

WHILE attending the Wisconsin Upper Michigan Florists Convention at Milwaukee, November 1-2, several florists remarked to the editor: "The apple exhibit at the Journal Food Show was wonderful. It did a great deal of good."

Fifty trays of apples were furnished by each of the following County Agents representing their County: R. B. Pallett, Milwaukee County, Guy S. Hales, Ozaukee County, J. F. Thomas, Waukesha County, E. D. Byrns, Washington County and Hugo G. Klumb, Racine County School of Agriculture.

The County Agents remained in attendance at the show and made thousands of contacts with consumers for their growers. Some of the features of the exhibit were: 1. Display of named varieties of Wisconsin cooking and eating apples; 2. Display of Wealthy apples from different Counties; 3. Apple dishes for the home with daily demonstrations by 4 H Club girls under the direction of Miss French, Milwaukee County Home Demonstration Agent.

The Milwaukee Journal says relative to the show: "Thousands of persons visited the Auditorium on Sunday, the closing day of the Journal's Food Show, bringing the total attendance for the show to 138,497. This is a new attendance record. A feature of the show Sunday was an exhibit of 250 trays of apples from five counties."

Premium List

Annual Convention Wisconsin State Horticultural Society
Milwaukee Public Museum, December 5-6-7, 1928

Rules: All exhibits must be in place by 12 M on Wednesday, December 5. Judging will begin at 1:00 P. M.

Trays and plates will be furnished for fruit and vegetable exhibits.

County Fruit Exhibit

C. L. Kuehner, Sup't; J. G. Moore, Judge

Open to any County in Wisconsin. Opportunity will be given for display of signs giving name of County and growers with each county exhibit, which must be a separate display.

A County display will consist of 10 trays of apples from at least *5 different growers* showing *not more than 5 varieties.*

From one to five varieties may be shown. If more than one variety is exhibited, at least six trays must be of one or more of the following varieties: McIntosh, Wealthy, Northwestern Greening or Snow.

Best County Exhibit—Milwaukee Journal Silver Trophy and $25.00.

2nd Best County Exhibit—Special Trophy and $20.00.

3rd Best County Exhibit—Special Trophy and $15.00.

4th Best County Exhibit—Special Trophy and $15.00.

5th Best County Exhibit—Special Trophy and $15.00.

Each additional County Exhibit—$10.00.

Individual Fruit Exhibits

N. A. Rasmussen, Sup't.

SINGLE TRAY EXHIBITS

Trays and plates will be furnished

	1st	2nd	3rd	4th
1. McIntosh ----------Boston Store Silver Trophy		$3.00	$2.00	$1.00
2. Wealthy ----------Kiwanis Club Silver Trophy		3.00	2.00	1.00
3. Delicious ----------	$4.00	3.00	2.00	1.00
4. Northwestern ----------	4.00	3.00	2.00	1.00
5. Fameuse (Snow) ----------	4.00	3.00	2.00	1.00
6. Windsor ----------	4.00	3.00	2.00	1.00
7. Wolf River ----------	4.00	3.00	2.00	1.00
8. Salome ----------	4.00	3.00	2.00	1.00
9. Westfield ----------	4.00	3.00	2.00	1.00
10. Tolman Sweet ----------	4.00	3.00	2.00	1.00
11. McMahon ----------	4.00	3.00	2.00	1.00

Best display of three trays each of any three varieties.

	1st	2nd	3rd
Silver Fruit Bowl Milwaukee Kiwanis Club		$8.00	$5.00

PLATES

A plate consists of five apples

	1st	2nd	3rd
1. Pewaukee ----------	$1.00	$0.75	$0.50
2. Baldwin ----------	1.00	.75	.50
3. Plum Cider ----------	1.00	.75	.50
4. Gano ----------	1.00	.75	.50
5. St. Lawrence ----------	1.00	.75	.50
6. Dudley ----------	1.00	.75	.50
7. Scotts Winter ----------	1.00	.75	.50
8. Grimes Golden ----------	1.00	.75	.50
9. 20 Ounce ----------	1.00	.75	.50
10. Golden Delicious ----------	1.00	.75	.50
11. Wagner ----------	1.00	.75	.50
12. Jonathan ----------	1.00	.75	.50
13. McMahon ----------	1.00	.75	.50
14. Wealthy ----------	1.00	.75	.50
15. McIntosh ----------	1.00	.75	.50

(Continued on page 81)

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor

Secretary W.S.H.S., Madison, Wis.

Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. B. Goff.....Sturgeon Bay
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
George M. Moseman.....Menomonie
W. E. Spreiter.....La Crosse
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

INDEX FOR WISCONSIN HORTICULTURE

WE ARE now publishing an index to articles appearing in Wisconsin Horticulture during the past three years from September 1, 1925 to September 1, 1928.

If you have kept these issues and wish for an index we will send one free of charge. Requests should be in before December 1, 1928. In the interest of economy we are not sending them unless requested.

NOTES BY THE EDITOR

SEVERAL letters we received this month made us feel our members are reading the magazine.

We appreciate especially letters in answer to questions. The one by Mr. F. T. Brunk of Eau Claire on Rhododendrons is an illustration of how our members can help each other and really use this organ as it should be used—to improve horticulture in Wisconsin and build up a strong State Society.

Mr. Wm. MacFerran of Topeka, President of the Topeka Flower Club writes:

"Kindly send me a copy of the August issue of your magazine "Wisconsin Horticulture". I want to read the article on page 324 to our Kansas Garden Club."

The article he referred to was by Mark Troxell, President of the Madison Garden Club. It may contain suggestions for your club.

This is the last issue of the magazine before the convention. The program will be improved if possible, by the addition of several outstanding speakers. Never before to our knowledge, have our members had the opportunity of attending in this state, a horticultural meeting with three programs to choose from—fruits, flowers or vegetables.

There is every indication that a large crowd will attend each section. The exhibits will be larger than usual due to the "County Fruit Exhibit" class, in which ten counties have already entered.

The Milwaukee Florists' Club is cooperating in putting on the Flower Show, which means a real show, and the Milwaukee Gardeners' Association will assure the success of the vegetable show and program.

A special program will be printed the latter part of this month giving the correct program, with the name of the meeting room in which each section is held, and full details of the convention. Write us if you want a copy before the meeting date.

Some people still think we sell subscriptions to this magazine. We don't! This is the official organ of the Wisconsin State Horticultural Society, and is sent free to its members only.

If your dues are paid, whether as an individual member or by affiliation with a local club or Society, you are a full fledged member and entitled to vote at the business meeting, held during the convention.

Some of our garden club members are under the impression that *if* the proposed State Garden Club Federation affiliated with this Society they might lose something—we don't know just what, but something! They don't seem to realize that they are already members, because their local garden club is affiliated in exactly the same way.

Almost all the Garden Clubs in the State now belong to this Society.

We are going to try to count the number of times visitors ask the question, "Were these apples grown in Wisconsin?", at the convention.

We trust the question will not come from a member of this Society.

YES, WISCONSIN HAS APPLES

HERMAN ULLSPERGER of the Door County Fruit Growers Union says they have sold their McIntosh apples to New York at $7.50 per barrel F. O. B. Sturgeon Bay.

The East has discovered the McIntosh while we in Wisconsin are still shipping in western boxed apples.

Try to buy a bushel of good Wisconsin Snow or McIntosh apples in your local store. Most people think Wisconsin doesn't grow any good apples. The only "eating" apples they see are Delicious and Jonathans—shipped from other states.

An item in the Milwaukee Journal states that farmers in Barron County cannot sell their apples and are inviting neighbors in to get them, free for the picking.

Stopping at Phillips, Price County, the last of October, we learned that carloads of Ben Davis apples, in bulk, were again being shipped in. They retail at about $1.00 per bushel. We have known this city of 2,500 people to buy from five to seven carloads of bulk Ben Davis with perhaps a few Baldwins and Greenings mixed in, each autumn.

Customers bring their sacks to the car and take from one to ten or fifteen bushels each. We never saw a car of Wisconsin apples among them.

Mr. Bert Bingham of Door County writes he is very busy packing and shipping his crop of forty carloads of apples. Did we hear someone ask "Were they grown in Wisconsin?"

The orchards at Gays Mills produced some fruit of wonderful quality this year, especially Snow and McIntosh. We heard recently that one orchard owner trucked fine Snows to Madison, and sold them to a store for $1.00 per basket. Next day they were on sale at $2.25 per basket, the ruling retail price on good Snows.

There is plenty of work to be done!

Look for the Convention program in this issue.

	1st	2nd	3rd
16. Delicious	1.00	.75	.50
17. Northwestern Greening	1.00	.75	.50
18. Fameuse	1.00	.75	.50
19. Windsor	1.00	.75	.50
20. Wolf River	1.00	.75	.50
21. Salome	1.00	.75	.50
22. Westfield	1.00	.75	.50
23. Tolman Sweet	1.00	.75	.50
24. Golden Russet	1.00	.75	.50
25. Willow Twig	1.00	.75	.50
26. Any other variety	1.00	.75	.50

Best display of five plates each of five commercial varieties.

1st	2nd	3rd	4th	5th
$10.00	$8.00	$6.00	$4.00	$2.00

Culinary Vegetables

H. C. Christenson, Oshkosh, Judge

1. Best collection, not less than ten entries	Nat'l Garden Bureau Medal and		$3.00
2. 6 Blood Turnip Beets	$1.00	$0.75	$0.50
3. 3 Rutabagas	1.00	.75	.50
4. 6 Chantenay Carrots	1.00	.75	.50
5. 3 Winter Cabbages	1.00	.75	.50
6. 3 Red Cabbages	1.00	.75	.50
7. 6 Red Onions	1.00	.75	.50
8. 6 Yellow Danvers Onions	1.00	.75	.50
9. 6 White Onions	1.00	.75	.50
10. Largest Onion	1.00	.75	.50
11. 6 Parsnips	1.00	.75	.50
12. 1 Hubbard Squash	1.00	.75	.50
13. 3 Table Queen Squash	1.00	.75	.50
14. 3 Heads Celery	1.00	.75	.50
15. 3 Chinese Cabbage	1.00	.75	.50
16. 6 Salsify	1.00	.75	.50
GREENHOUSE GROWN			
17. 3 Bunches Radishes	1.00	.75	.50
18. 5 Tomatoes	1.00	.75	.50
19. 3 Cucumbers	1.00	.75	.50
20. 3 Lettuce	1.00	.75	.50
21. Largest premium winner greenhouse vegetables	Silver Trophy—Milwaukee Gardeners Association		

Flower Show

Huron Smith, Milwaukee Public Museum, Superintendent; Wm. Longland, Lake Geneva and James Livingstone, Milwaukee, Judges

Exhibits must be ready for the judges by 1:00 P. M., December 5, 1928.

CHRYSANTHEMUMS

(1) Best dozen yellow "Mums"	$6.00	$4.00	
(2) Best dozen white "Mums"	6.00	4.00	
(3) Best dozen pink "Mums"	6.00	4.00	
(4) Best bunch Single Pompoms	3.00	2.00	$1.00
(5) Best bunch Double Pompoms	3.00	2.00	1.00
(6) For the best exhibit of 25 "Mums", a silver cup with winner's name engraved.			

The exhibits entered in (1) to (5) inclusive may be entered in (6) also and may include as many other colors, varieties, etc. as the exhibitor desires. This cup will be awarded only for a "high class exhibit" and if it is the opinion of the judges that no worthy exhibit is made, no award will be made.

CARNATIONS

	1st	2nd
(7) Best fifty carnations, any color	$6.00	$4.00

ROSES

(8) Best twenty-five light pink	$5.00	$3.00	
(9) Best twenty-five dark pink	5.00	3.00	
(10) Best twenty-five any other color	5.00	3.00	
(11) Best three Cyclamen Plants	4.00	3.00	
(12) Best any six blooming plants other than Cyclamen	8.00	6.00	$4.00
(13) Best specimen Boston Fern	3.00	2.00	
(14) Best display everlasting flowers	5.00	3.00	
(15) Best bouquet for vase	4.00	3.00	
(16) Best arranged basket cut flowers—W. S. H. S.	Silver Trophy		
(16) Best arranged basket cut flowers—Milwaukee Horticultural Society	Silver Trophy		

About the Home and Garden

MRS. C. E. STRONG, Editor 80th and George St., West Allis

LET US TALK A LITTLE BIT ABOUT GARDEN CLUBS

WHEN the gardens are all tucked away for the winter rest, we turn with eager interest to the Garden Club programs. We wonder very often whether we can get the right sort of speakers for every meeting—some one who will enthuse the members so that they will surely come to the next meeting. It all means anxiety and also expense, also a wee bit of doubt—is it really worth while? Are we getting what we should; are we doing any good?

A Garden Club should do things, either for themselves or for some one else, else they have no excuse for being.

We are asking a great deal of speakers when we expect them to do the things we ourselves fail to do.

The really successful Garden Club, is the Club in which every member takes an active part in the programs.

During the summer they work in their gardens, they give Flower Shows, etc., in the winter they study about plants, trees, and shrubs; they read Garden books written by folks who have studied and worked in gardens; they discuss these books, give reviews, they plan their next summer gardens, they work with the children in the schools—no garden club need be dull if they would try a winter's work with the children.

Try holding your meetings at the same time the School Garden Club meets. Let your members give demonstrations on how to sow seeds, how to transplant, how to plant shrubs, what to use as fertilizers, how to disbud plants for larger flowers, how to cut flowers for Flower Shows, how to arrange these flowers in vases and baskets. Use trays to teach them a bit of landscape gardening; let them plan the home grounds, working there in the school room. Then help them give an exhibit, with the most successful pupils giving demonstrations as to the why and how of the work.

Help them in their Flower Shows, there is no one thing that will spread the love of gardens like interesting the children, for those children are to be the home owners of tomorrow. It is to them that we must turn if we expect our State to remain beautiful, to grow more beautiful.

If you feel that you do not want to spend your time entirely on the children, then study something. Do it thoroughly; make it worth while and give the results of this study to your fellow gardeners; send it to the home town paper; send it to Horticulture.

For instance — What does your club know about Lilies? If you studied about them, found out how to grow them—all the varieties hardy in Wisconsin and then grew them. Would not your gardens be more beautiful; would not your real knowledge be of much benefit to your community, as well as to other flower lovers throughout the state?

Are you interested in Botany? Have you some knowledge? A bit more would help you as well as others. This is very interesting when gathering wild flowers, it helps the children also if you are interested and able to explain interesting facts to them.

It has been said that "In flower gardening there is nothing that gives such pleasure as gathering with the years and learning with the years—you never get to the end, and who wants to? A garden is not made to be finished within the span of one human life."

If your club is a busy club, you will have no dull meetings, spring with its first flowers will be here before you will have finished the things you planned to do, you will continue the work because your Garden Club means so much to each one, and let me whisper to you a secret—when a Speaker does come to you, he or she will give you much more help, because you are in the right mood to receive it. The speakers will also be helped because they can give to other Clubs that spirit of real helpfulness that prevades your Club.

Mrs. Strong gives us some valuable hints on garden club programs, tulips, care of house plants and suggestions for early spring flowers. Don't forget, now that the rush is over, to write her your experiences.

GIVE ME FLOWERS

I would rather have one little rose
From the garden of a friend
Than to have the choicest flowers
When my stay on earth must end.

I would rather have a loving smile
From a friend I know is true
Than tears shed round my casket
When this world I've bid adieu.

Bring me all the flowers today,
Whether pink, or white, or red.
I'd rather have one blossom now
Than a truckload when I'm dead.
—Taken from the *Milwaukee Journal*.

GARDENING HINTS

Did you ever try potting tulip bulbs, then planting them pots and all in one corner of the garden just as though you intended leaving them there?

Try it and see how nicely those pots can be moved to some vacant spot next spring, thus adding the bit of color you so much wish in that particular spot.

Are you one of those many who like to leave the tulips in one spot for several years, but do not like to see the yellow stems and leaves?

If you are, try sowing the seeds of Siberian Wallflower, annual Larkspur, annual phlox, snapdragon, among your bulbs late in the fall.

There will be strong hardy plants to give a succession of bloom and cover the yellowing stalks and leaves that must be left to ripen.

If the plants come up too thickly, thin so they make sturdy plants that can be cultivated when necessary.

Do not forget to have plenty of earth, sand and boxes in the basement if you intend to start those choice seeds early in the spring.

If you ever tried to gather up a bit of ground along in February you will understand the need of remembering to lay in a store right NOW.

Rake up the leaves and add to the compost heap. If you have never started a compost heap, now is the time to begin, it is never too late to remedy mistakes.

You can still plant those bulbs, they will need a bit of covering so that they may root strongly —but you will be glad of the extra effort when they bloom next spring.

Do not forget to watch the house plants that were out of doors all summer—or you will be dismayed to discover the hosts of aphis that seem bent on staying with you all winter.

Spray thoroughly with a soapy tobacco solution every week for several weeks, it will save you much trouble later on.

If you have new plants from the florist, do not let them get too dry.

Remember that the atmosphere of the green-house is much more moist than your living room.

DO NOT water Cyclamen over the top of the bulb, if it is a healthy plant with plenty of foliage—the constant moisture collected will rot the bulb, and the florist will be unjustly accused of selling you a poor plant. The Cyclamen needs plenty of water usually, as the roots are against the sides of the pot, if these get dry, the plant wilts and the buds blast.

Watch and care for your plants just as you care for the other members of the family, they will appreciate this care, they will never forget to say "thank you".

HOUSE PLANTS PUNY? AIR MAY BE TOO DRY

Plants in the home during a Minnesota winter cannot thrive unless temperatures are moderate, the air is kept moist, and plenty of light is supplied. "The greatest fault with the average home is that the air is too dry," says Louis Sando of the division of horticulture at University Farm. "The almost total absence of humidity produces a condition foreign to the plant's requirements."

Mr. Sando cautions homemakers to use care in watering plants. There is danger of overwatering. On the other hand, he says, do not keep the plants dry. Drafts from doors and windows are hard on plants. Rooms are often too dark.

"A newspaper or a piece of brown paper will work wonders," says the university man, "in keeping cold air from plants at night during the coldest weather. Give all the light possible. I have yet to see the house in which the light is too strong for plants in winter. If gas is used for cooking only and doors are closed leading to other rooms, I have found that it does not kill plants. If gas is used for illuminating purposes, do not try to grow plants at all."

—*Minnesota Horticulturist.*

RHODODENDRON IN WISCONSIN

I NOTED the inquiry of Mrs. E. T. Erickson of West Salem regarding Rhododendron in Wisconsin.

I have Rhododendron Catawiense which has passed two central Wisconsin winters and has bloomed nicely each summer. I also have planted by its side Azalea Calendulacea which has also bloomed each spring. They are located under small trees where they get sun up to ten o'clock and the balance of the day shade and somewhat protected from the Northwest wind by a building. I planted in a small mound made up of swamp earth and leaf mould and keep a three or four inch dressing of leaves around them at all times, and about twice each year I bury under the leaves several tablespoons of Aluminum Sulphate (Not Alum), and I am careful not to let our sandy soil get too dry. I make a small mound where they are planted to give drainage in early spring.

For winter protection I bank with dry leaves about half way up and cover with a large light store box made of very thin boards or veneer such as is used for crating hats or cotton bats, but a few holes must be left for air. This keeps snow and ice away from the plants in the spring. If there is plenty of snow I keep it well banked around the box.

Yes, it is quite a lot of bother but if we want these rare plants in northern Wisconsin we must expect to give them attention, and they are surely worth it.

Yours very truly,
F. T. BRUNK,
335 Summit Avenue,
Eau Claire, Wisconsin.

Garden Club Activities

GARDEN CLUB FEDERATIONS

THE effort made in October to form the Wisconsin Garden Club Federation has developed considerable interest in the work of State Garden Club Federations.

The plan was first developed in Virginia in 1920. Since then there has been a remarkable increase of interest in the garden club movement.

There is at present an organization called The Garden Club of America which was organized in 1904 and which has been a powerful influence to improve the practice of gardening and arouse a wider appreciation of newer and better garden material.

There are at the present time fifteen garden club federations in the United States representing 406 clubs. There are of course a large number of clubs in States that have not been Federated. Wisconsin is one of them.

In the October issue of "Horticulture" the organ of the Massachusetts, New York and Pennsylvania Horticultural Societies, we find a list of the Federations in the United States with their Secretaries. They are as follows:

Garden Clubs of Virginia, 18 clubs, Mrs. C. G. Evans, Danville, Va.; Garden Club of North Carolina, 12 clubs, Mrs. F. F. Bahnson, Winston Salem, N. C.; Florida Federation of Garden Clubs, 20 Clubs, Miss Gerda E. Meigs, Jacksonville, Fla.; Federated Garden Clubs of New York State, 73 clubs, Mrs. Arthur Knapp, Bayside, N. Y.; Kansas Associated Garden Clubs, 23 clubs, Mrs. O. E. Searl Hutchinson, Kansas; National Capital Federation of Garden Clubs, 16 clubs, Miss Laura Wadsworth, Washington Grove, Md.; New Jersey Federation of Garden Clubs, 36 clubs, Mrs. W. A. Halliday, Plainfield, N. J.; Tennessee Garden Club, 14 clubs, Mrs. C. D. Richmond, Chattanooga, Tenn.; Garden Club of Illinois, 60 clubs, Mrs. Frank Kingsley, Evanston, Ill.; Garden Club Federation of Massachusetts, 34 clubs, Mrs. H. H. Buxton, Peabody, Mass.; Garden Club of Ohio, 17 clubs, Mrs. F. B. Stearns, Cleveland, Ohio; Oregon Foundation Garden Clubs, 25 clubs, Mrs. Robert Warren, Forest Grove, Oregon; Iowa Federated Garden Club, 20 clubs, John A. Fitzsimmons, Ames, Iowa; Garden Club of Georgia, 28 clubs, Mrs. George Street, Atlanta, Ga.; Maryland, 10 clubs, Mrs. Charles Reimann, Baltimore, Md., President.

GARDEN CLUB PROGRAMS

Has your garden club planned its winter program?

The program outline as prepared by the Milwaukee Club illustrates what can be done to insure interesting meetings. It is not necessary to have outside speakers, in fact, the members will get a great deal out of preparing the papers themselves.

PROGRAM SUGGESTIONS FOR GARDEN CLUBS

WE HAVE received a program plan for the coming winter months from the Milwaukee County Horticultural Society which offers such good suggestions to other clubs for their program that we pass some of the items on to our readers.

For instance, the November meeting will be devoted to peonies with a report of committees on the Horticultural Society Convention. First of all there will be a report of what determines the price of a peony which information the reporter is to obtain from a prominent grower.

The topics assigned to the different members will be as follows: 1. Varieties and kinds of peonies. 2. Dividing and planting. 3. Fertilization and soils. 4. Growth and time of planting. 5. Insect pests, diseases and treatment.

In December the program will be on Dutch Bulbs. The reporter will write to a prominent bulb Company for information on best sizes, best time to buy and best time to plant.

The bulb topics are listed as follows: 1. Varieties and kinds of Dutch bulbs. 2. Treatment on receipt. 3. Fertilization and soils. 4. Digging, storage and planting. 5. Methods of increase. 6. Insect pests, diseases and treatment.

At the January meeting the topic will be on dahlias, in February on Iris, in March on Roses, in April on Lilacs, Spireas and Viburnums, in May on Border Plants and in June on Gladiolus.

Each topic is divided into sections somewhat similar to the above. At one or two of the meetings there will be outside speakers to take up the topics mentioned.

In case a club is not in position to get outside speakers readily it can easily be seen that with good books available on all of these topics, members themselves can give a very satisfactory report.

HALES CORNERS CLUB MEETING

By MRS. ARTHUR W. JOHNSON

THE October meeting of the Hales Corners Garden Club was held at the home of Mrs. Charles Fickau.

Mrs. Sperber outlined the procedure of the meeting which was held at the Public Museum at Milwaukee for the purpose of organizing a State Federation of garden clubs.

The Constitution and by-laws were read and discussed.

A letter from Mr. Rahmlow was read urging as many as could possibly do so to be present at the meeting to be held in Milwaukee on December 5-6-7.

Mrs. Sperber told of having found a long row of peonies afflicted with root rot. The plants were all dug out, rotted portions of the roots were cut away, remaining portion treated with semesan and replanted in another place.

Mrs. Fickau made some cuttings of a Los Angeles rose bush and put them in a pot of earth in a house window. She now has several new Los Angeles rose bushes, as all the cuttings rooted and have new leaves.

Lunch was served.

PIERCE COUNTY CLUB SHOWS ACCOMPLISHMENTS

THE October meeting of the Pierce County Horticultural Society was held at the Court House in Ellsworth October 5.

First on our program was a statement of our financial status and the issuing of checks to cover expenditures. It was decided that the prizes for the five best childrens' gardens, given by the president of our Society, be given on Achievement Day at Ellsworth November 3.

A committee was then appointed to consist of the County Agent and two others to buy containers for the next flower show.

A vote was taken and Spring Valley will be given that honor of having the show providing suitable arrangements can be made.

The rural planting committee was discussed and the Executive Committee instructed to find out what can be done about having "The Pines" set apart as a permanent picnic grounds.

We also voted to assist in the Home Improvement Plan as much as possible by locating such shrubs, trees, plants etc. as may be dug from roadsides, woodlots etc.

The Executive Committee was instructed to revise the County Fair Premium list before May 1st of 1929, and also to confer with the Rod & Gun Clubs and Isaac Walton League in regard to putting on a bird house campaign for next year. We think this can be carried out through the schools during the winter months.

We then discussed the planting of tulips and other bulbs and decided to send for 1650 tulip bulbs in one order because we could get a substantial reduction by ordering by the thousand. We also discussed the winter care of dahlia, canna and gladiolus bulbs.

We voted to discontinue the central meetings for this season and break up into three units for the winter, each unit to do the same work at the same time.

At our November meetings we will discuss Holiday Decorations, Winter Bouquets and the Winter Covering of Plants.

MRS. ALVIN D. HURTGEN.

OSHKOSH HORTICULTURAL SOCIETY MEETING

THE October meeting was held at the Oshkosh Public Museum on the evening of the 1st. A very enjoyable meeting was held, the business meeting being opened after the usual picnic supper.

The meeting was opened by the singing of "America" and minutes of previous meeting were read and approved. Miss Friday who was delegate to the summer convention at La Crosse gave us her report as there were a number of the members who did not attend the corn roast at Wm. Nelson's home where the previous report had been given.

Mr. Blake, Mrs. N. A. Rasmussen and Mr. Brunka gave their reports on the County Fair, the booth trimmed by Mr. Blake for the Oshkosh Horticultural Society winning first prize. There was some discussion of the manner of handling flowers and vegetables at the next year's fair, and it is thought that more space should be allowed for these exhibits which will be taken up with the proper parties in time for the next Fair.

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which describes three kinds of Lady Slippers, the dainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozens of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. TOOLE
Garry-Nee-Dule
BARABOO, WISCONSIN

Some suggestions in changing premiums listed for flowers and vegetables were also brought forward and these will be followed up later.

There will be an attempt to make the November meeting a Booster meeting, and build up a larger attendance for the Winter meetings.

MISS AGNES PHILLIPSON,
Secretary.

SUM-MER-DEL ELECTS NEW OFFICERS

By MRS. C. S. HASSENPLUG, Sec'y

The Sum-Mer-Del Garden Club held its first annual meeting October 19, at the home of Mrs. F. W. Whitman, Nashotah.

The election resulted in the following being chosen:

President—Miss M. A. Lowerre.

Vice-president—Mrs. H. B. Hitz.

Secretary—Mrs. Charles T. Smythe.

Treasurer — Mrs. W. W. Parker.

Annual reports were read by Mrs. Hassenplug and Mrs. Salsich, while Mrs. Nixon's report was an original story called "A Garden Phantasy", a romance suggested by flower's names.

Miss Moore conducted tests of our knowledge of plants and flowers, their culture etc., and another of our knowledge of botanical and popular names of flowers and plants.

Mrs. Hitz gave a talk on "Spring bulbs for house blooming", their appearance, suitable containers, also cultural directions.

Miss Moore invited us to a "Garden Party". This was another original story woven about seventy-five flower's names — either popular or botanical.

Mrs. Rogers read the "Suggestions", which members had presented, for benefit of Program Committee or Club's improvement or enlargement of ideas or work.

The display of exhibits of flowers and containers was interesting as it exemplified the benefit of last month's lecture and drill.

One of our members has recently had a formal garden designed and planted. An extensive rock garden is also being built in a gulley leading to Oconomowoc Lake.

One member is making an extensive planting of Lilium Candidum, and replanting a large part of her perennial beds. Someone is naturalizing several hundreds of narcissi bulbs.

Special programs for fruit growers, vegetable growers and garden clubs at the convention this year.

Mention WISCONSIN HORTICULTURE when writing our advertisers.

Dependable Nursery Stock for Wisconsin Growers

Hardy Fruits, Flowers and Ornamentals

Sold Direct from Nursery to Planter

Prices Right

74th Year

Kellogg's Nursery

Box 77 **Janesville, Wis.**

Member
Kenosha Florists and Nurserymen's Association
Assoc. Member
Illinois Nurserymen's Association

The Swartz Nurseries

GROWERS OF

Shade, Ornamental & Evergreen Trees
Shrubs, Vines and Roses

Park, Cemetery, and Golf Ground Planting

Landscape Architects

KENOSHA, WISCONSIN

Phone 2F4

News From Upper Wisconsin and Michigan Florists

By HURON H. SMITH

JIMMY DALE OF THE COPPER COUNTRY

"GOD'S Country" is the term James H. Dale, of Hancock, Michigan, invariably uses when he refers to the Copper country, and now that we have seen that entire upper Michigan peninsula, we believe him. We always thought of it as next door to the polar regions, but nothing could be further from the truth. It is actually a better climate than Milwaukee. Frosts and storms do less damage up there than they do here, and the scenery is wonderful.

The Copper Country is coming back, with the price of copper mounting, and millions are being spent in re-opening mines. Jimmy ought to know for he has a large chunk of C. & H. himself (Calumet & Hecla), and we saw the evidences of renewed activity. Jimmy knows practically everybody up in that country and his flower business is built upon his friendships and his reputation for service. The cities in which he operates are not large, but the folk are well-to-do and want the best of fresh flowers,—no artificial stuff for them.

Twenty years ago Sam Lutey, of Ishpeming, and James H. Dale, were partners in the Copper Country. A. H. Yorke had the greenhouse at Hancock. Two years after Mr. Yorke's death, Jimmy bought the place from the widow, out on Lake Linden highway and he calls it the Highland Park Greenhouses. If there was ever an ideal location for greenhouses, he has it. At the foot of a young mountain facing the southeast, there are 50,000 feet of glass. The whole mountain is covered with springs that never fail in the driest weather. He has made a reservoir and uses gravity to conduct it through his greenhouses and his fine residence. With all of the greenhouse watering and his outdoor watering over the 12 acres of outdoor summer stock, he has never emptied the reservoir. The mountain protects the greenhouse from storms and the inland waterway seems to keep the atmosphere warm. It is always 12 to 15 degrees warmer at his greenhouse than it is on the highway that passes his place at the foot of the hill.

Dale is proud of his country and has reason to be. It sports more fine specimen evergreens than we ever saw in any park, with towering cliffs, rapid trout streams and the rugged seacoast appearance of Lake Superior. He never wearies of showing the countryside to the many visitors.

Copper Country Notes

There are several florists up in the little known Copper country—all of them getting along fine. The news of their whereabouts should be interesting to the trade at large. They are only a night's journey away from Chicago, but few trades people ever get up to see them. The Art Flower Shop, at 83 Sheldon Street, in the Hobba building, are next door to the Dale Houghton flower shop. Mrs. Mutter, the make-up lady, was the flower girl for James H. Dale for a long time, but left three years ago February to have her husband start up a new store. Wm. J. Bennett and Chas. W. Mutter are the proprietors. They report good business and say that they are in the business for keeps. They buy their stock from the Woodside Floral Co. in Hancock and from Chicago.

The Woodside Floral Shop, at 107 Quincy street, Hancock, is just across the street from the Dale Flower Shop. The proprietors are Alfred Langdon and Tom Sawyer. Huck Finn is no longer with them. They have a greenhouse at Dollar Bay, four miles east of Hancock towards Lake Linden on the same highway as the Dale Greenhouses.

Iron Country Notes

While the northernmost part of the Upper Peninsula of Michigan is a copper country, the central, eastern and southern part are iron producers, and while not so wealthy as the copper country, are still active for longer periods than the copper country. That there are plenty of florists there goes without saying. For miles and miles, one may motor through the Ford Motor Country forests and iron mines, and find many florists at the principal cities. Everywhere you strike a large Ford business you find a big wireless outfit. They haven't time to wait for the "hello girl", but hire and fire 'em by radio.

There are four florists in Iron Mountain, Michigan, where Ford's greatest woodworking factories are located. The pioneer is Rex Plowman, who has been at it for 30 years. His

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

greenhouses are annexed to his residence at 603 Fleshiem street, in the southwest edge of the city. He is one of the cliff dwellers and was repairing his four houses for the winter season when we arrived. He formerly had a store in the Ford town and one on the main drag of Iron Mountain, but discontinued them, since most people preferred to come to the greenhouses anyway. His snapdragons, carnations and pompons were coming into crop. All of his roses are bought in Milwaukee and Chicago. He is a member of the F. T. D.

O. F. Eskil, has the largest greenhouse establishment in the city, and is located at the edge of the city on Michigan Highway 2. He is another cliff dweller, with the greenhouses perched high above the highway. Eskil is one of the enthusiastic Walton League members and it is a question whether he is at Iron Mountain for the florist business or for the wonderful fishing and hunting thereabouts.

Standley Flowers maintain a flower shop in Iron Mountain but go in heavier for shrubbery and landscape work than they do for cut flowers.

Menominee, Mich.

Forty years ago, Hans Laursen started a truck farm and vegetable greenhouse where now stand the up-to-date conservatories of Hans Laursen & Son, at 218 Taylor Avenue, Menominee, Michigan. On their 18 acres at the edge of town or almost right in town, they grow a bunch of shrubbery and nursery stock for their landscaping business. Just a year ago they built a new office and conservatory, with curved eave houses after the manner of the Hugo Locker place in Wauwatosa. It surely is goodlooking. Their greenhouses otherwise have just growed up like Topsy and ramble around over considerable space, covering 35000 feet of glass. But they have been modernized in bench and equipment with electric lights and fine, wide, all-concreted aisles.

New Green Bay Store

Green Bay, Wisconsin, is the oldest settlement in the state, having a well-known history for over three hundred years. It is a rich community with great manufacturing interests, considerable wholesale businesses, fine residences and rich suburbs, including a population around about 45,000 people. It is a city that decided to have a new Y. M. C. A. and put on a week's campaign to raise $675,000 for it. In two days they were over the top. They love flowers, too, as any summer visitor may see in the beautiful estates and spacious grounds about the city. They have had two mighty fine florists for these many years, both of them growers and both having fine retail stores on the main street, Washington Avenue. We refer to Meier-Schroeder Company and to the De Clerc Floral Company.

Now comes a new flower store, too, with much prestige behind it. This is Hamilton's Flowers from Manitowoc, Wis. Walter Hamilton the grower and retailer is the son of the late millionaire Hamilton at Manitowoc, who was famous for his wood-working plant where factory trucks, woodtype and other commodities were made. While Walter will probably never make the fortune his father did, in flowers, he has a good start, and is installing his new store in the most up-to-date method.

Marinette, Wisconsin

In Marinette, Wis. it is the Vatter Floral Company and no one else. George Vatter believes in having such a huge place as to overawe and overwhelm competition. So he has it his own way, which has turned out to be a pretty good way, too. The greenhouses take an entire city block.

Mr. Vatter has incorporated the business for his whole family, since he has passed the 70 mark.

In the eight large houses are 45,000 feet of glass, the cleanest greenhouses we have ever seen, bar none. Mr. Vatter started back in 1886, 42 years ago, and has observed the 40th anniversary of his greenhouse business. He remembers "'way back when" carnations were fifty cents a dozen, and mums 75 cent a dozen.

Mr. Vatter used to have a down town store, but his customers seemed to want to come down to the greenhouse, so he fixed the place up there with every modern convenience. He has his own spring water, fountain and goldfish pool in front of the greenhouse and everything more modern than you would expect in a town of 16,000 inhabitants. He had a very fine lot of stock and his mums were extra choice for this early in the season.

One peculiar thing was the lot of flowering hydrangeas that he had and was selling now. Snapdragons are his best paying stock, and were in bloom now. They make him more money than carnations, of which he has eight benches. He raises the best Laddies in the State. Something in their soil is adapted to Laddies. His best seller right now is the "Uvalva" a fine white pompon, and he had plenty. He does considerable wholesaleing around his territory.

Mr. Vatter had plenty of palms and decorative plants for interior decorating and plenty of curiosities or oddities for advertisement. Bread fruits, bananas, cycads and other peculiar plants were maintained to attract the public. He had a fine lot of 2500 cyclamen in bloom. Mr. Vatter was one of the organizers of the Wisconsin Upper Michigan Florists Association and wouldn't miss a meeting for anything.

A Nature Fair

By AMELIA POPE SUTHERLAND, Kenosha

A NATURE Fair was given on September 28 at the Grant school, Kenosha under the direction of Miss Florence Peasley, principal, in cooperation with teachers and pupils.

The north side and the ends of the large gymnasium were filled with exhibits. The walls were artistically decorated with nature posters, mounted seed, grass and flower collections.

A noticeable feature was a booth trimmed with grasses, seeds and weeds, picked in the Grant school backyard. No longer need trees be despoiled or farmers' cornfields robbed to provide attractive decorative material when such artistic results can be obtained with the more common, less valuable plants.

A cash prize was given to the boy and girl exhibiting the best collection of twenty-five objects from nature materials, by Miss Peasley. These prizes were won by Felix Barejka and Winnifred Simonds.

Another cash prize was given for the best book of mounted specimens of flowers, weeds and grasses. In this class the judge Miss Josephine Eddy of the Bain School Science Department found the competition keen.

The books were very complete and well made. The award went to Robert Lundskow.

Ribbons, first and second, were offered for the best display of vegetables, best living pet, best articles made from wood and from cloth; for best nature drawings, cuttings and clay modeling. Also for the best collection of feathers and for necklaces made from seeds, berrries, acorns or other nuts, combined with straws, macaroni and twigs.

The small children exhibited turkeys, animals and dolls made from vegetable and other nature materials. A doll made from red and green peppers won the blue ribbon. Awards were made for the best potted plants, best flower collection and best baked article exhibited with recipe.

A special feature was an exhibit of collections of corn products. Some children had as high as sixteen articles in their groups.

The Kindergarten displayed a sand table filled with black dirt in which had been carefully planted house plant slips. These will become Christmas presents for the mothers of the Kindergarten children.

Another feature of unusual interest was a scenic landscape in miniature built of grasses, twigs, flowers and moss, upon a small sand table.

Last spring the children ordered seeds at school, their orders being combined and sent as one thus securing good seeds at reasonable prices.

Spring lessons were given on seed germination, preparation of soil and planting plans were made by the children.

GAS DOESN'T KILL ALL PLANTS

A GOOD many people think the reason they cannot succeed with house plants is because they use gas. While this is true with certain varieties, especially geraniums, which will die from even a small amount of gas, there are others that do quite well.

The rattlesnake plant, Boston fern, Asparagus fern, Rubber plant, Amaryllis and iron plant are among those that have been grown in homes where gas is used.

Intelligent care is necessary to succeed with house plants. There is a great deal of pleasure in successfully growing beautiful plants. The way to do it is to start with the determination to give them the correct care, and then stick to it. Our articles on "House Plants" by Professor Moore will explain all the necessary steps in detail.

Don't forget the annual convention Milwaukee Public Museum and Library, December 5-6-7.

Strawflowers in many colors and varieties. Baskets made up—$1.50–$3.50 many colors and varieties.

We mail these anywhere. Add 50 cents for packing and postage.

Send for free catalog on strawflowers and 200 varieties of hardy perennials.

Chequamegon Flower Gardens

V. E. Brubaker, Mgr.
Washburn, Wis.

Can We Save Our White Pine

Another Blister Rust Infection Found

By E. L. CHAMBERS

DURING the past week plant pathologists of the Wisconsin Department of Agriculture discovered an infection of white pine blister rust on wild gooseberry bushes in the vicinity of Commonwealth in Florence County. This is the second new infection center of this disease found in the eastern part of the state by the department this fall, the first being found several weeks ago in northern Waupaca and Shawano Counties.

With the discovery of a serious infection of this fungus on white pine near Barron in August and these widely separated infections on currant and gooseberry bushes, the nurserymen and lumbermen are becoming intensely interested in a problem that heretofore they have been inclined to belittle.

Those who are familiar with this disease say that next to fire, blister rust is the greates hazard Wisconsin will have to deal with in its reforestation. This deadly disease spreads rapidly under favorable conditions and is capable of wiping out hundreds of acres of splendid white pine stands in a very few years.

This disease was likewise discovered for the first time in the Upper Peninsula of Michigan. Two of the several counties found infected are Gogebic and Dickinson which border Wisconsin. Vilas County, one of those adjoining the Michigan infection area, is one of our principal white pine growing counties.

The situation has already become desperate in New England and New York where a total of $191,000 was appropriated toward its control last year, New York State alone appropriating $75,000. These appropriations are met by large appropriations made by the federal government.

This disease was not discovered in Wisconsin until 1916 when it was found in St. Croix County from which it has been spreading each year until it is now known to be present in 12 counties. During the past two years the appropriation of $1000 has been entirely inadequate to carry on the necessary control work.

It was pointed out by the department that pine owners can control this disease economically and effectively by the removal of wild currant and gooseberry bushes among and within 300 yards of the trees, since blister rust cannot spread directly from pine to pine.

Plans are underway to conduct a survey through the schools of the state during the coming year by which means it is hoped to get valuable information concerning the distribution of the rust. The department hopes that the legislature will make sufficient apprpriation to carry on the necessary eradication and scouting work necessary to protect the state's valuable white pine stands and make it safe to carry on reforestation with white pine which is the best adapted tree for this purpose in Wisconsin.

WHY THE BLACK CURRANT MUST GO

LIKE the common barberry, the black currant has been placed on the black list because of the part it plays in the transmission of a fungous disease which destroys another very important and valuable crop. The common barberry (not the Japanese variety) being the intermediate host for the black stem rust, could not justify its being kept in the face of the loss it causes to small grains.

The common history of white pine blister rust, a fungous disease responsible for enormous losses to white pine stands since its introduction into the United States is that European black currants "catch" blister rust infections in localities far from any infection center, causing this disease to advance by leaps and bounds. Many examples of such long distance spreads are recorded. Furthermore, the large leaves produce enormous numbers of spores which cause infections on near-by white pines.

Since blister rust threatens the future of the white pine forests and cultivated black currants accelerate the advance of the disease, it becomes necessary to choose between two crops, black currants and white pine. The total value of all European black currants in the United States is estimated to be $898,000 by the U. S. Department of Agriculture, figuring that each bush was worth $1.25 which, we believe, to be much too high. This compared with $548,250,000, the estimated value of the merchantable five needled pine timber of the United States, is six hundred times as great as the total value of the black currant plants. Taking this into account, together with the future value of the young pine already growing, there is only one choice to make for the thirty-six states having native white pine forests and in which the planting of white pine is of great economic importance; they must eradicate the black currant.

The European black currant, as pointed out above, is not extensively grown in the United States but is found to some extent in most sections where currants are cultivated. As its name indicates, it is of European origin. This species

known botanically as *Ribes nigrum* is commonly called the cultivated black currant to distinguish it from the species which grows wild in large numbers in many sections of the northern part of the state, *Ribes americanum*. The latter species differs from the cultivated one in having ridged stems and resin dots on both upper and lower leaf surfaces. The wild species is much less susceptible to blister rust and compared to the cultivated species is relatively ineffective in establishing the disease.

Many people confuse the ornamental flowering currants *(Ribes aureum)* and *Ribes odoratum* with the cultivated black currants because they too bear black berries. Both of these species have comparatively small leaves. Flowering currants are also known as spice currants, Missouri currants. While they are readily infected with blister rust, they are not as extremely harmful to white pine as the cultivated black currants.

The state nursery inspection regulations restrict the sale of only the cultivated black currants (in addition to the inspection tag required on all nursery stock) while the federal regulations permit only the movement interstate of cultivated red and white and mountain currants and cultivated gooseberry plants and these only during the period from September 20 to May 15 and under the following conditions:

(1) That, if shipped in the fall, the said plants are defoliated (i. e., without leaves); and, if shipped in the spring, they are free from leaves of the previous season's growth: *Provided,* that, if shipped in the spring after April 15, the said plants shall be completely dormant;

(2) That, before shipment, they have been completely immersed (except the roots) in a solution consisting of one part of concentrated lime-sulphur solution testing not less than 32° Baume to 8 parts of water by volume, the dilute solution to test not less than 4.5° Baume. Such lime-sulphur dip shall be plainly visible on said plants and be easily detectable by odor, the judgment of the inspector to be final as to adequacy of the dip and as to the condition of the plants as to dormancy and defoliation;

(3) That the container shall be plainly marked to show that currant and gooseberry plants are contained therein.

Special programs for fruit growers, vegetable growers and garden clubs at the convention this year.

Bordeaux Mixture
Arsenate of Lead
Calcium Arsenate
Arsenite of Zinc
Dritomic Sulphur
Sulphur Dusts

ORCHARD BRAND
SPRAY and DUST MATERIALS

Whether You Spray or Dust

YOU are investing material plus labor. You must have results or you will lose not only your money spent but crop profits, too! Play it safe and buy "Orchard Brand" Materials. They are the standard of dependability.

GENERAL CHEMICAL COMPANY
40 Rector Street, New York
St. Louis Los Angeles San Francisco
GCI 58

ORCHARD BRAND
REG. U.S. PAT. OFF.
SPRAY & DUST MATERIALS

Bob-White Checks Potato Beetle

OUR old time enemy the "potato bug" seems to be decreasing in number the last year or two. We have heard a number of comments as to the reason for this decrease.

Mr. E. L. Moseley of Ohio has written a bulletin entitled "Bob-white and Scarcity of Potato Beetles", in which he gives a number of reasons why Bob-white may be helping get rid of the beetle.

Bob-whites have been protected in Ohio with a closed season and a great increase in the number of these birds is noticed. Mr. Moseley says:

"For several years past potatoes have been raised successfully on many farms in Ohio without spraying for beetles or taking any measure to combat the insects. In fact many patches have been practically free from the "bugs". For more than half a century the Colorado potato beetle has been a very serious pest wherever potatoes have been raised. Why it should disappear I could not explain. I had wondered if ladybirds, which fed upon the eggs of this beetle, had multiplied; or if some other enemy was holding it in check."

Mr. Moseley enlisted the help of his students of the Ohio State Normal College in making further observations and inquiries. The following is the summary of the information thus collected.

"Bob-whites have been observed to spend much of the time among the potato vines.

They have been seen to follow a row, picking off potato beetles.

When the potato patch was located near a woodland there was no trouble with the beetles; but when the patch was near the highway or buildings even on some farm, the insects were troublesome.

On farms where the Bob-white found nesting sites and protection, the potato vines, if not too near the buildings, were kept free from the insects.

A patch of potatoes surrounded by open fields, without bushes, tall weeds or crops that might shelter a Bob-white, was likely to be infested with beetles.

A farmer living eight miles south of Defiance raised about fifty Bob-whites on his place. During the two years that these birds were there he had no trouble with insects on either potatoes or cabbage. The following autumn a number of the birds were killed by hunters, while others were frightened away. The next summer the potato beetles were back in numbers. The farmer is again raising Bob-whites and protecting them from hunters."

E. H. Forbush of Massachusetts wrote as follows:

"When the Bob-whites were most plentiful on my farm they kept the potato beetles in check, so that we did not have to spray at all; and I have heard of several other instances."

We will welcome letters from our readers in regard to this subject. Have you had trouble with potato bugs in past years while in the last year or two they have decreased? If so what is the reason for it and do you think Bob-whites have helped.

6 Peony Roots for $3.00

12 Fine Peony Roots, $5.00

100 Choice Gladiolus Bulbs $2.00
10 each of 10 kinds labeled,
FOB by Express. October and
November delivery

Send For Catalog

Stonecrest Gardens
Eau Claire, Wis.

CAN THE CHILDREN HAVE A GARDEN

(Continued from page 76)

several times until we had rich cornmeal and with our buttermilk we made the best brown Johnny cake I ever saw or tasted. The kind neighbor baked it for us and we sent her a piece all melting hot with our fresh butter.

Then, all that spice left from our pickling was on our minds. What else was out in the garden that we could cook with spice? Pumpkin pies! And so we did, little individual ones in patty pans, the children again doing all the work except the baking. Of course we saved seeds from the ripest pumpkin for next year.

We had over a bushel of carrots so we sent our surplus, (of course we ate many at recess), to the nearby hospital to help sick people get well. Since the mothers enjoyed the bouquets which the children often carried home, we decided to give flower seeds to them for Christmas. Each little packet had the picture of the flower crayoned upon it as well as the name written by the teacher.

The third year we again enlarged our wildflower space adding wild phlox, buttercups and other flowers. The children had now earned a little wagon by selling Red Cross Seals so we could always go after black dirt. We used a little commercial fertilizer this year also.

We began now to get back the returns for which we aimed in the beginning, home gardens. So we promised the children a fair in the fall. The fair of course was the crowning result of our efforts. Meantime, many things were learned incidentally. Our wild, single rose had crossed with the neighbor's double one until the petals were literally jammed in on end too crowded to be pretty. We learned, that while we loved "bouncing Betty"

and wild snapdragons, we made work for the kind neighbor, for they spread rapidly. We found that castor beans took up too much of our precious space and so on.

Well, we were finally moved four blocks away into a fine new building where the grounds are landscaped by the city park Commissioner and we dare not mar the symmetry.

So much for gardening itself. But I miss the chatter of thoughts spoken out loud and confidentially. "Teacher, I know a word you didn't say begins with 'q' — cucumbers." "Do worms go to heaven when we kill them?" "Isn't the outdoors big and clean and still and pretty? What makes it so?" Rural school teachers, I envy you your opportunity.

WISCONSIN CABBAGE CROP GOOD

The cabbage growers this year are favored with much better prices than a year ago. The market opened very actively due to the general shortage of cabbage in the eastern states. The acreage of cabbage in United States this year is somewhat below a year ago, and the tonnage produced in some of the eastern sections is low.

The Wisconsin cabbage crop is a very satisfactory crop—an average yield of 10.5 tons per acre as compared with 8.5 tons last year being reported by Wisconsin crop reporters for October. Some fields, particularly in the Racine-Kenosha sections, are reported as being late and needing some good weather to make satisfactory yields.

WALTER H. EBLING,
Agricultural Statistician.

Mention WISCONSIN HORTICULTURE when writing our advertisers.

INDEX TO ADVERTISERS

	Page
Bahr Nursery	94
Chequamegon Flower Gardens	89
Cumberland Fruit Package Co.	93
Fitchett Dahlia Gardens	66
Friend Mfg. Co.	66
Gelbke, C. A. & Sons	94
General Chemical Co.	91
F. R. Gifford Co.	95
J. H. Hauser	87
Kellogg's Nursery	94
McLaughlin Gormley King Co.	96
North Star Nurseries	93
Rasmussen's Fruit Farm & Nurseries	94
Sisson's Peonies	94
Stonecrest Gardens	92
The Swartz Nurseries	86
W. W. Thompson Sons	95
W. A. Toole	85
White Elm Nursery	95

STATE POTATO SHOW

(Continued from page 74)

Yorker, Triumph, Irish Cobbler and Early Ohio varieties.

While the demand for seed stock is not as brisk as at this period last year, some sales of Triumph, Irish Cobbler and Green Mountain varieties have been made.

Growers are storing quite generally on the farm or at the shipping point in the hope of better prices and demand.

Considerable stock is still in pits in the field, an unsatisfactory storage, especially in this season of excessive rains and other undesirable conditions.

Garden Flowers is a little monthly published by Garden Flowers Publishing Co., 77 South Ave., Rochester, N. Y. Editor: John C. Davis. The March number is the third issue. It is as the name implies a magazine for garden flower lovers, telling of flowers for everyone. The price is but Fifty Cents a year.

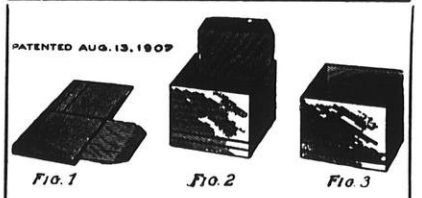


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

THE NORTH STAR NURSERY COMPANY

PARDEEVILLE, WISCONSIN

Growers of

Dependable Nursery Stock for Wisconsin Planters

Write for our illustrated catalogue of hardy stock

Our Motto

Quality - Service - Satisfaction

Landscape Contractors
Builders of Beauty

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

SHRUBS — ORNAMENTALS — ASPARAGUS Plants. West Park Nursery, C. A. Gelbke and Sons, Appleton, Wis.

NURSERY STOCK

FOR SALE: NURSERY STOCK. FRUIT and ornamental trees. Shrubs and perennials. Send for list. Bahr Nursery, Manitowoc, Wis.

A NEW WRINKLE FOR MAKING SATISFIED CUSTOMERS

OH, LOOKIT the apples!" This is what we hear ten to forty times a day. Each new customer is thrilled with the sight of ten or a hundred baskets of apples as they greet his or her vision.

It is usually a pleasure, but sometimes is not, to wait upon these semi-business callers. Some only want a peck and some want a load, and some want a few to eat, and some don't want any at all—"We haf bushels to home, we can't give dem away but we have heard so much about SKi-Hi, we taught we drive up once."

Well that brings me back to where I started. You know human nature likes to get something for nothing—if it is only the prize in a box of crackerjack. Our friend Arno Meyer told us last year that he gives "free cider, all you can drink". Well we used to do that but folks don't look at that as "free" any more. They just naturally got that a-coming when they buy apples and cider.

I have hit on a new wrinkle this year. We have a couple of flower beds near the house and somehow the Lord spared them when we had that hard frost in September and my Dahlias, Zinnias, and Hollyhocks are still blooming profusely. So I let every lady go and gather a bouquet. And oh how happy and grateful they are.

Then another thing, we have a pumpkin patch behind the chicken coop and I just ask the kiddies if they would like a pumpkin for Halloween. Well say, it is worth heaps to see these youngsters carrying home their will be Jack-O-Lantern.

And say, they drive home happy? You ought to see their faces, Pop and big brother chuck full of cider, Mom holding the last bouquet of summer, and the kids all hugging a big round pumpkin.

"Goodbye, thanks, thanks for everything!"

A suggestion; Why not discuss the "bird nuisance" at our December meeting.

Dependable—

That is a quality we constantly strive for; we want every customer to feel confident that his orders will be cared for in a dependable manner, and that the plants he receives will be of highest quality and absolutely true to name and description.

We grow a complete line of fruit and shade trees, ornamental shrubs, perennials, climbing vines, berry plants, etc. consisting of the best varieties.

—Catalog on Request—

Visitors Always Welcome

RASMUSSEN'S

FRUIT FARM AND NURSERIES

Oshkosh **Wisconsin**

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

MICE AND RABBITS IN THE ORCHARD

(Continued from page 68)

the boxes and empty cans from the canning factory, with the cover cut part way out, bending the same out making a roof over the opening.

We expect to put these boxes and cans out before November 1st and they will be put at every other tree in every other row, making one for each four trees.

I am going to use ½ oz. of strychnine for each bushel of grain, dissolving the poison in about six quarts of hot water, then put over grain which should be kept hot and well stirred until the water is soaked into it. Put the grain out at once or dry it, otherwise it will mold.

We also have several thousand screens three mesh to the inch, 15 inches in height, these we use on small trees and are left in place until they are tight and must be removed."

HOUSE PLANTS

(Continued from page 72)

the sides of the pot and the earth ball. This removes the roots which one should be most concerned in saving.

After the plant is slipped out of the pot the drainage material which is imbedded in the earth ball is removed. If there are low forms of plant life growing on the surface of the soil, a small amount of the top soil should be removed, but the root system should not be disturbed. The plant is set in the new pot, the soil in the bottom being increased or decreased to bring the plant to the proper height. New soil is then put in between the earth ball and the pot, making allowance for some settling. The pot is grasped with both hands, thumbs inside the pot, and as the pot is turned the soil is thumbed (pressed) down firmly. In shifting large plants, thumbing is impractical. In such cases the new soil is firmed by using a flat stick as a tamper.

ORCHARD
Pruning Tools

GARDEN
Seeds and Tools

FARM SUPPLIES
Lime Spreaders, Fertilizers, Etc.

Write for Prices

F. R. Gifford Co.
2201 University Ave. Madison, Wis.

White Elm Nursery Co.
Hartland, Wisconsin

General Line of
Ornamentals and Fruits

Imported Holland Bulbs

200,000 finest quality at lowest prices. Orders taken now, and shipped on arrival about October 1.

Breeder tulips, aristocrat of the Darwin family in six or more of the best varieties for parks, cemeteries and private homes. Have something different than your neighbor. Only $3.00 per 100. Assorted varieties, quantity of 250 and up $2.50 per 100. Best named varieties red, yellow, scarlet, pink, lavender, orange, $2.00 per 100. Best forcing varieties, $3.00 per 100.

No. 1 size Wm. Pitt, Bartigon, Princess Elizabeth, La Notre, Wm. Copland, Prof. Rauwenhof, Mad. Krelage, Clara Butt, Pride of Harlem, Farncombe Sanders, Snowdrift and Grape Hyacinths, $2.00 per 100.

Crocus—4 varieties $2.00 per 100. Fancy large $3.00 per 100.

Dutch Hyacinths, white, blue, pink, yellow, $5.00 and $8.00 per 100. Paper white for forcing $6.00 per 100.

Parrot tulips, 4 varieties $2.50 per 100.

Daffodils for forcing, mother bulbs $8.00 per 100. Emperor, Bic. Victoria, Sir Watkins, Callos White or yellow, 15¢ each. Daffodils for planting outside only $1.50 per 100. 75¢ per 100 Emperor, Sir Watkins, Bic. Victoria, Glory Sassenheim, Golden Spur, Von Sion, Spring Glory $3.00 and $5.00 per 100. King Alfred, $3.00 and $5.00 and $8.00 per 100 cash.

W. W. Thompson & Son

Station D. Route 1, Box 913 **Milwaukee, Wis.**

Convention Headquarters For The State Horticultural Society

at the

REPUBLICAN HOTEL

RAY SMITH, Inc. THIRD & CEDAR STS.

Milwaukee, Wisconsin

Eat in our Big Dining Room Cafeteria, Selection of 200 foods or in our

Grill - Luncheon 65c Dinner 85c

Sandwich Shoppe - Specializing in Toasted Sandwiches

Those attending the Convention can reduce their Costs by forming groups

Make Reservations Early

How Much Do You Lose Each Year Because of Insects?

THE most successful growers have devoted a great deal of thought and experimentation to this ever-present menace. Many of them have turned to **Ever Green** as the most scientific and efficient method of insect control available today. More and more growers, both large and small, are finding that every dollar invested in **Ever Green** pays them a profit in larger, and finer crops.

You, too, will find it profitable to use **Ever Green.**

Spray with

Try It On our money-back guarantee. Sold by seed houses and florist supply houses. If your dealer isn't supplied, send $1.00 for 6 oz. bottle, circular and spray chart.

McLaughlin Gormley King Co. **1722 S. E. Fifth St., Minneapolis, Minn.**

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

Vol. XIX DECEMBER, 1928 No. 4

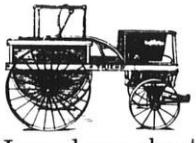
TABLE OF CONTENTS

	Page
Christmas Greetings	99
At the Mid-West Exposition	100
Distributing Poison Unlawful	102
House Plants—James G. Moore	103
E. S. Goff, sketch	106
Proposed Plant Registration	106
Growing the Gold Banded Lily—Frank P. Giloth	107
Advertising Our Apples—C. L. Kuehner	108
Don't Kill Birds	109
Notes from North Dakota—A. F. Yeager	109
Paris Green Kills Mosquitoes	109
Peonies	110
Our Cover Picture	112
Notes by the Editor	112
Paint on Pruning Cuts	112
Manitowoc Harvest Festival	113
About the Home and Garden — Mrs. C. E. Strong	114
Leaves Used as Fertilizer	115
How Many Gladiolus Varieties	115
Garden Club Activities	116
Pierce County Plans Program	
Lilies Discussed at Milwaukee Meeting	
Hales Corners Club Visits "Mum" Show	
Sum-Mer-Del Program	
Racine Club Elects Officers	
Madison Club Notes	
Admission to Flower Shows	118
Annual Convention of Wis.-Upper Michigan Florists—Mr. Huron H. Smith	119
Annual Fall Flower Show	119
Milwaukee Discusses the Peony	120
Our Maples Are Worth Saving—E. L. Chambers	122
Horticultural Awards for 1928	125
Milwaukee Rosarians Active	126

"FRIEND" SPRAYERS

Are Made Large, Medium, Small.
For All Kinds of Spraying
Fruits and Vegetables

Used the World Over



Write for information
"FRIEND" MFG. CO.
GASPORT, N. Y.

Low down short turn
Cut under style for orchards
Many sizes

Thanks—

At this season we wish to return thanks to our legion of friends who have helped, by their patronage and kindly interest, to spread the fame of Fitchett Dahlias.

We have in our cellars a well-ripened stock of sound tubers, the best we have had in years. New catalog ready soon. Early orders accompanied by cash receive a special premium.

Fitchett Dahlia Gardens

735 E. Milton Ave., Janesville, Wisconsin

A Good Old Fashioned Christmas to You!

Now comes the Good Old Christmas Time!

With joyous hearts and merry jingling of sleigh bells,
father, mother, brother and sister drive to
Grandma's for Christmas dinner.

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS

President
J. E. Leverich, Sparta

Vice-President
C. J. Telfer, Green Bay

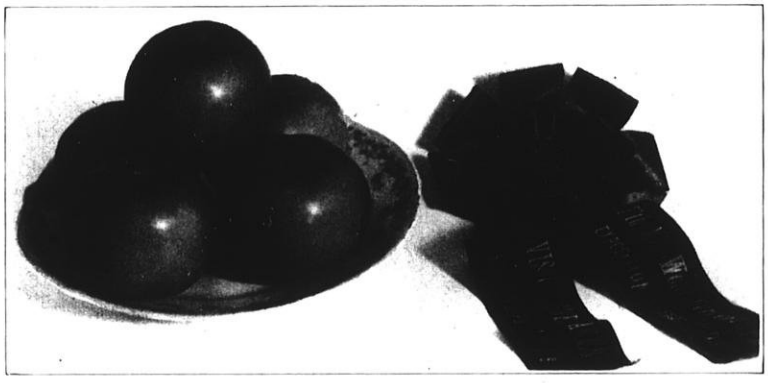
Secretary
H. J. Rahmlow, Madison

At The Mid-west Exposition

Our Fruit and Potato Growers Win Many Prizes. Interesting Topics on Convention Program

WISCONSIN fruit and potato growers made a splendid showing at the Mid-west Horticultural Exposition and Convention at Cedar Rapids, Iowa, November 14–17.

Competing with hundreds of plates of apples from all sections of the middle west, New Mexico to the Canadian line and from Ohio to the great Plains, a plate of Wisconsin McIntosh won the grand sweepstake prize as the best plate in the show. This plate was grown by J. G. Milward of Madison and is shown in the accompanying picture.



A plate of Wisconsin McIntosh led them all.

The Greenings exhibited by Mr. A. K. Bassett of Baraboo also took most of the premiums. Mr. Bassett won first on the best single box and 5 boxes of Northwestern Greenings, the best five trays of Northwestern Greenings. and had the best five plates of Greenings. He also had the best five plates of Snows. In addition he won first prizes on the following plates: Snow, Wealthy, Windsor, Wolf River, Senator, Stark, Yellow Bellflower.

Mr. Bassett won second prize on plate of Ben Davis and third prize on Gano, Jonathan, Pewaukee, Salome, and Tolman Sweet.

He won second on the standard bushel of McIntosh, five standard bushels of Northwestern Greenings, one bushel basket of Northwestern Greenings, standard tray of Jonathans, single tray of Jonathans, a tray of Greenings and five plates of Wealthy.

He won third on the best single bushel of any other variety, ten trays of Greenings, five trays any other variety, five plates of Ben Davis and five plates of McIntosh.

He won fourth on five plates Golden Delicious. and five plates of any other variety.

In addition to having the sweepstake sample of McIntosh Mr. J. G. Milward of Madison won first on single tray of any other variety and he won second on five plates of McIntosh.

Potato Winners

Northern Wisconsin potato growers took first or second in every class they entered. J. W. Smith of Bryant, Langlade County won first on Triumphs while Ed Kringle of Rice Lake won first on Rural New Yorkers. Gus Kringle of Rice Lake won 2nd on Rural New Yorkers.

First prize on Green Mountains went to Willis Jewell of Rhinelander, first on Irish Cobblers to Felix Alderton of Laona, and second on Irish Cobblers to L. S. Jacobson of Mole Lake.

Iowa Horticultural Society Gets Good Cooperation

The cooperation given the Iowa Horticultural Society by its affiliated organizations is one of the reasons why they can put on a successful show and convention.

The state organizations affiliated with the State Horticultural Society which held their annual conventions in connection with the Horticulture Exposition were the Iowa Beekeepers Association, Iowa Fruit Growers Association, Iowa Vegetable Growers Association, Iowa Nurserymens Association and the Iowa Peony and Iris Society.

The Iowa Garden Club Federation, organized during the past year, will affiliate with the State Horticultural Society at their next meeting.

Best results can only be obtained by cooperation and unity of effort.

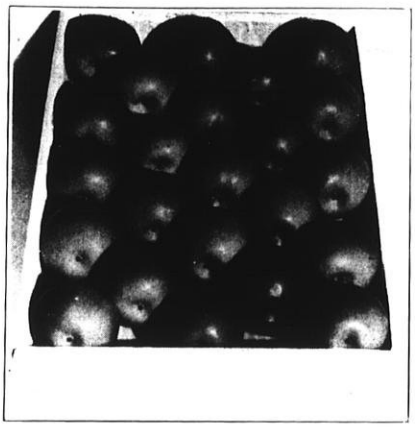
There were delegates present at the convention from almost all the mid-western states. Those present from Wisconsin were J. G. Milward, Madison. A. K. Bassett, Baraboo, H. J. Rahmlow, Madison.

The show was held in the large beautiful Memorial Building at Cedar Rapids, which is a fitting stage for such an exhibition.

Wonderful musical programs were given. There were from 1,000 to 1,500 paid admissions each evening. In the center of the large auditorium was one of the most beautiful displays of flowers we have ever seen. Gorgeous "Mums", beautiful roses, carnations, numerous pots of cyclamen. Jerusalem cherries and peppers were there in large numbers. There was also a wonderful display of ferns and the corsage bouquets, colonial bouquets and baskets of novel arrangement were fine.

The table decorations consisted of bouquets of roses, orchids and chrysanthemums. In the opinion of the judge the color arrangement of some of the winning tables were the best he had ever seen.

There was also a large exhibit of the different varieties of nuts grown in the middle west and a very fine exhibit of potatoes and other vegetables.



A winning tray from Wisconsin.

At the Mid-west Horticultural Exposition one of the speakers told of results along this line at the Iowa Station. He said the use of vegetables high in vitamine A would make a person more resistant to colds and sinus troubles.

The vegetables which are high in vitamine A are beans, cabbage, carrots, chard. lettuce, spinach, squash and tomatoes. In fact the green leafy portion of most any plant is high in vitamine A. While the use of these vegetables, or a Vitamine A ration cannot be prescribed for colds, still it is their observation that animals or people on a good diet containing this vitamine are more resistant to these troubles. This fact is of value to our vegetable growers and even more so to the housewife wishing to give her family a correct diet.

Mr. A. K. Bassett of Baraboo in his 40 acre "Ski-Hi" orchard. Mr. Bassett won many apple premiums at the "Mid-West."

A Vegetable Diet Gives Resistance to Colds and Pneumonia

Colds and pneumonia are liable to follow if a ration low in vitamine A is used. This is the result found by scientists in working on nutrition problems. White rats fed a ration low in vitamine A were found to be very susceptible to colds, sinus troubles and pneumonia.

Best Paints for Tree Wounds

What kind of paint is best for tree wounds? This was one of the topics discussed at the Mid-west Horticultural Convention.

Professor T. J. Maney, chief of the Pomology Section of the Iowa Horticultural Department, presented the subject. He experimented with over twenty different kinds and types of

paints and coverings. Cuts or wounds made lengthwise with the trunk or branch of a tree were exhibited, showing that paints having an asphalt base gave by far the best results in healing over the wound.

The interesting thing about these experiments was that wounds covered with a white lead and oil paint or with a paint containing a tar base did not heal well. The center of the wound was in all cases killed and the bark did not grow across the cut. The cuts he used were about twelve inches long and about three inches across. Paint with an asphalt base did not inure the center of the wound and bark grew over this space.

It was further demonstrated that the edges of the wounds were not injured at all by any type of paint. There has been an impression in the minds of many fruit growers that the edge of a cut should not be painted as it might kill the cambium layer and thus prevent healing. This is not true as no type of paint injured the edges whatever.

No paint at all on a wound was found to be still better than white lead and oil paint, or paint with a tar base. On check wounds or cuts on which no covering was used, there was fairly good healing, but not nearly as good as where the asphalt paint had been applied. There are a number of asphalt paints on the market, some of them called pruning compounds, which will give good results.

Rabbits Can't Be Fooled

A report of experiments to find a substance to be applied to trees to prevent rabbit injury was given by Professor Maney of the Iowa Horticultural Department.

All the results obtained were negative. In this experiment a wild rabbit, after some effort was caught and confined in an enclosure in which the trees had been treated in a number of different ways. There is an old belief that a tree painted with rabbit blood will not be touched by a rabbit. This was proven to be untrue. Neither were coverings such as lime sulpher, white lead and in fact anything whatever that the experimentors thought might have some effect, of any good. Evidently the rabbit knows his bark, and the department was forced to the conclusion that mechanical protection is the only hope to keep out bunny.

It was emphasized in the experiment that the rabbits were not starved, or forced to eat the bark to keep from starving, as they were given vegetables and other food sufficient for their needs. It is known however, that when prunings of trees containing buds are thrown on the ground the rabbits will eat these first.

DISTRIBUTING POISON UNLAWFUL

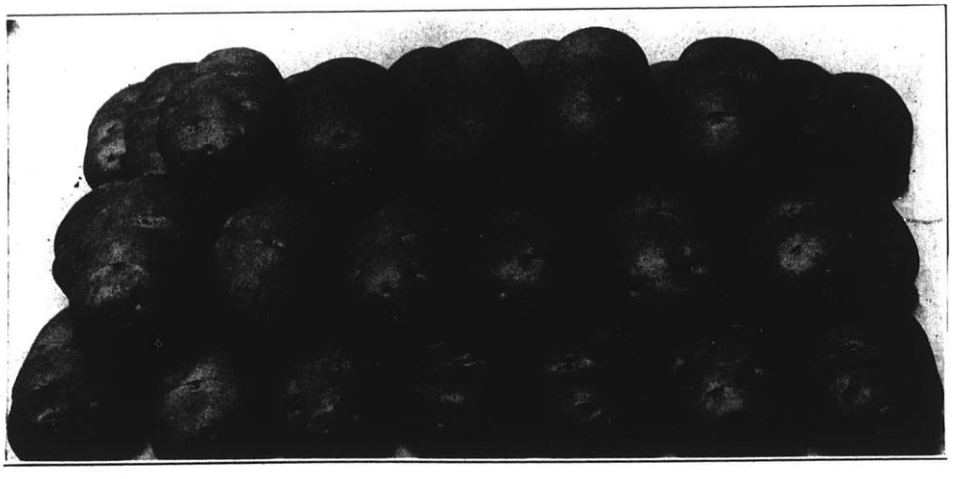
IN OUR last issue we mentioned a method of treating grain with strychnine and putting it in small tin cans or wooden boxes for mice.

There is a state law, however, against distributing poisons of any description where it might destroy wild animals or birds.

The law reads as follows: Section 29.60 (5) (a) "It shall be unlawful to put out baits containing poison of any description in any forests, fields or other places where it might destroy or cause the destruction of wild animals or birds—"

Orchardists using this method should be careful that the poison is placed in such a way that it is not accessable to wild animals or birds. We have heard that strychnine does not kill birds, and if the material is put in a box or can with an opening only large enough for mice, no other animal should be destroyed.

The potato crop in Wisconsin is estimated at 31,000.000 bushels this year as compared to 24,000,000 bushels last year.



A WINNING SAMPLE OF GREEN MOUNTAINS

Wisconsin growers won first in all of the potato classes in which they exhibited at the "Mid-West" show.

House Plants

A Few Essentials for Success

(Continued from November issue)

By JAMES G. MOORE

Mites Are Hard to Control

Mites or red spiders are the most dreaded pests of both the commercial and home florists. This pest is so small that it usually has a good start before discovered. It begins its work on the under sides of the leaves, spreads to the upper sides and, if unmolested, finally covers the tips of the branches with a very delicate network of webs. Its presence should be detected long before this stage is reached. The earliest indications of mite attack are light colored (whitish) areas on the upper side of the leaf. When such areas appear, examine the underside of the leaf carefully, using a magnifying glass if one is available, and it is quite likely that mites will be found. If so, use Volck at once. Watch the plant carefully, and if necessary, repeat the treatment in four or five days. Mites are likely to be much worse when the plants are growing in high temperature and dry atmospheric conditions.

The white fly is readily detected because the insects fly from one plant to another when disturbed. Examination of the underside of the leaves will reveal the presence of numerous little oval bodies which look like eggs. Volck is also the remedy for this pest.

There are two common groups of scales attacking house plants: the flat scales commonly found on palms, and the half-globe shaped (hemispherical) scales, which attack palms, ferns, and several other house plants. The usual treatment is to wash them off, using a stiff brush and the nicotine sulfate and soap water. Recently we have had success in the greenhouse in controlling scales by using Volck.

Whenever Volck is recommended, washing with nicotine sulfate and soap water is probably the best substitute, in case Volck cannot be secured.

Another quite common pest of potted plants is the angleworm. They cause the soil to become puddled, which results in poor drainage and the usual bad effects arising from it. If the soil has become puddled before the pest is discovered, repot the plant. If it is not puddled, apply lime water. Slack one-half ounce of stone lime in three quarts of water. Allow the lime to settle and water the plant with the clear lime water. Some plants are injured by lime in the soil. In such cases, set the plants in water which is deep enough to come up to the surface of the soil. This is usually not so certain a remedy as lime water.

Plants Need Rest

All are familiar with the fact that some plants, particularly bulbs, insist upon a rest period. Even with those which can be kept growing continuously, better results are secured if they are given a period of reduced growth or complete inactivity. With winter flowering plants, and most foliage plants. this rest period should come in summer. They should be carried in partial shade, fertilization should be discontinued, and the water supply reduced to just enough to keep the plants from being injured. Care should be exercised to keep them free from pests. With such plants as palms and ferns a common

PALMS, UNSURPASSED FOR GRACE AND STATELINESS

Left, Phoenix roebelini, one of the best palms for house decoration; center, Kentia Belmoriana, curly palm, commonly used; right, umbrella plant, a common substitute for palms.

method of handling at this time is to set them out-of-doors in partial shade. When convenient, the pots may be sunk to their rims in a trench in the bottom of which has been placed a layer of about one inch of cinders and ashes. Earth, sand or ashes may be filled in between the pots. This plunging of the pots reduces the frequency of watering and gives more uniform soil conditions.

SPORE BODIES OF FERNS ARE OFTEN MISTAKEN FOR SCALE

Left, single hemispherical scale on fern leaflet; center, older fern leaflet with spore bodies along edge and single hemispherical scale in center; right, fern leaflet with spore bodies and a white scale.

The proper time for bringing in the plants and starting them on their active growth period is just before frosts are to be expected in the fall. Any repotting or shifting that is needed, pruning and the selection of the foundation wood for the season's growth are also tasks to be performed at this time. Start the plant into growth slowly, particularly if it has been repotted.

Many home florists bring in geraniums, coleus and other plants which have been in beds during the summer. Usually more satisfactory plants will be had by starting new ones in early autumn, but if this is not done, then the old plants which are brought in should be cut back very severely. Only three or four strong growths should be left and they should be cut back to two or three nodes (joints) each.

Summer blooming plants should rest during winter. Most of them are quite woody and will endure conditions which would kill a succulent plant. As the end of the blooming period approaches, reduce the water supply. This reduction should continue until the foliage begins to fall. The plant may then be set away in a cool place to await the active period the following spring. All the attention that is needed during the winter is the application of just enough water to keep the roots from drying out. This is usually very little. In January, February or March, depending on how early flowering is desired, the plants are given conditions suitable for growth. The repotting and pruning previously advised takes place at this time. The pruning of the various plants of this group will vary somewhat as they differ materially.

Sometimes bedded geraniums are carried over winter to be used the following summer. Pruning of these plants would be the same as if they had been used for potting in the fall. Fuchsias should be cut back as suggested for plants resting during the summer. The oleander is usually grown more in the form of a tree and will need little pruning.

Ferns Are Very Popular

Almost all plant lovers are partial to ferns. Unfortunately, these beautiful foliage plants are inclined to be rather insistent upon certain cultural conditions. They refuse to respond satisfactorily in a dry atmosphere and succumb quickly to gas fumes. They should also be protected from cold drafts. The more moist the atmosphere, the more favorable it is to the growth of this class of plants. Most house plants like an abundance of sunlight, but the fern thrives best in the absence of direct sunlight, particularly in spring and summer. One should not make the mistake, however, of thinking that ferns do not need light as none of our plants will make good vegetative growth without it.

It is a common practice to over-water ferns. This usually occurs because of improper methods of watering or the lack of proper drainage. Many fern enthusiasts have heard that it is better to supply water by setting the pot in a receptacle containing water. There is nothing objectionable in this method if properly done. It is a serious mistake however, to keep the pot in water continuously, or even for the greater part of the time. Ferns in jardineres should receive particular attention to avoid this condition. Some growers claim better results when the pot containing the fern is set in a much larger one and the space between them filled with sphagnum moss.

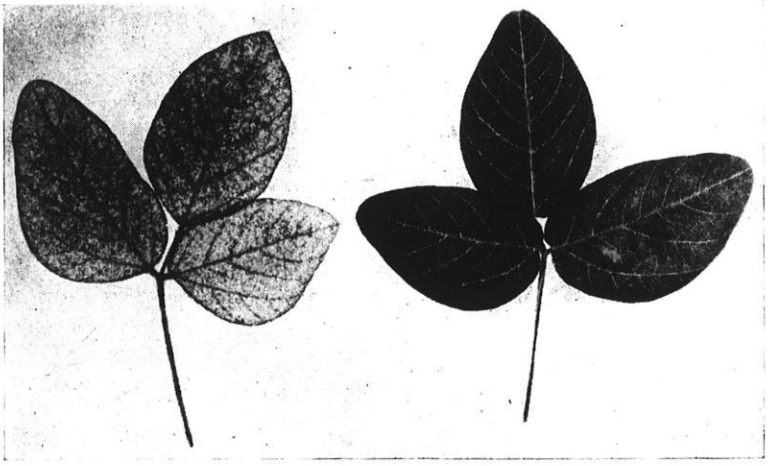
The soil requirement of ferns differs from that of most house plants in that it should contain much more organic matter. There is no definite rule but from thirty to fifty per cent of

Bulbs are popular for late winter and spring effects.

the potting soil for ferns may be leaf mold or its equivalent. Ferns should be shifted quite frequently when growing in the smaller sized pots. When the larger sizes are reached, less frequent shifting and more feeding will be more satisfactory. A fern grower should be on the lookout for scale and mealy bug as they are quite likely to appear, particularly on the sword ferns. The various types of fern differ somewhat in their ability to succeed under unfavorable conditions. There are a number of ferns which can be used indoors, but three types are most commonly tried. The one seemingly best adapted to adverse conditions is the Pteris fern. This group is not so well known among home florists and is not appreciated as much as it should be. From the standpoint of attractiveness it is possibly inferior to the better known sword or Boston fern, but there are a number of really attractive and interesting kinds to be had and they stand more abuse than the latter.

The Boston fern type is next in ease of culture. In addition to the original type there are some kinds having waved or ruffled leaflets which are very satisfactory. The Roosevelt and Teddy Junior are two of the principal varieties of this type. In recent years the florists have brought out variations of the sword fern in which the leaflets are divided one or more times giving the leaves a lacy appearance. Some of these kinds which are commonly known as "lace ferns" have become quite popular. It seems to be somewhat more difficult to grow these kinds than those with the undivided leaflets. They are so attractive, however, that most persons will want to try at least one or more kinds. Whitman's fern (Whitmanii), Whitmanii compacta, Magnificia and Elegantissina compacta are among the better kinds in this group.

With both the Boston and lace fern types it is very important to exercise extreme care not to injure the delicate tips of the leaves. Only very slight injury will cause the tip to cease unfolding, the end leaflets will drop off and the plant will be very much less attractive.



WHITISH SPOTS ON LEAVES? SUSPECT MITES!
The leaf at left badly infested with mites. At right, no mites.

The Maiden Hair ferns (Adiantum) can scarcely be called satisfactory house plants. Occasionally one sees a good specimen in a home but they are so difficult to grow well under house conditions that most home florists will prefer to try something easier.

Bulbs From Christmas Until May

Bulbs have become very popular for the late winter and spring effects. While a plant lasts for a comparatively short time, the bulb's period of usefulness can be very greatly lengthened by bringing the plants into growing conditions at different times. By this method and the proper selection of kinds, flowering bulbs may be had from about holiday time until the out-door bulbs begin to bloom. There is a moderately long list from which to select, the more commonly used ones being hyacinth, both Dutch and Roman; narcissi, including the daffodils and occasionally jonquil; fressia; and tulips, particularly the "early" and Darwin types. The latter is rapidly gaining in popularity and with the increased cost of narcissi, bids fair to become the most important of the group.

With the exception of the fressia, the culture of these bulbs is practically identical. There are about five cardinal principles of successful bulb culture. They are: good, healthy bulbs; rich, moderately light soil; a period of root development before forcing the top; not too rapid a rise in temperature

(Continued on page 124)

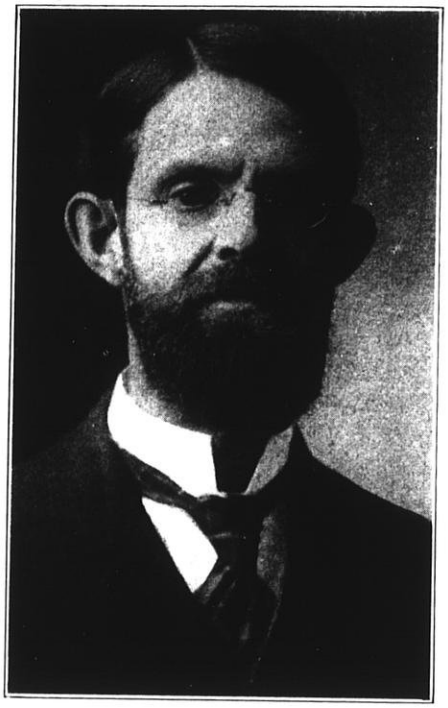
"He Did Outstanding Work in Fruit Culture"

WISCONSIN orchardists have again paid honor to whom honor is due.

The name of another veteran in the field of scientific and practical horticulture has been inscribed in Wisconsin's roll of honor. A life likeness of the late E. S. Goff. head of the department of horticulture at the Badger state institution from 1893-1902, has been hung in the "Hall of Fame" on the agricultural campus of the University of Wisconsin.

Hundreds joined in paying this tribute to a man who did outstanding pioneer work in fruit culture in their state. The picture, as hung in the rotunda of Agricultural Hall, was painted by the artist, Merton Grenhagen, of Oshkosh, Wisconsin.

Goff was elected to the chair of horticulture at the Wisconsin institution in 1889, going to that state from the New York Experiment Station at Geneva.



E. S. Goff

Was an Original Investigator

As an investigator, Goff was regarded, by his peers, as original and ingenious. He was deeply in earnest in promoting projects that would be of the most benefit to the farmers of the state and nation. Possibly his most noted and outstanding piece of work, carried on at the University of Wisconsin and at the University of Chicago, was on the "time and manner of the formation of flower buds in fruit trees."

Besides working zealously as a scientist, Goff was extremely active in promoting horticultural projects, in encouraging farmers' institutes. and in stimulating other public gatherings designed to improve rural life.

In addition to his teaching and research work, Goff found time to write three books on various phases of fruit culture. These were "Lessons in Fruit Growing", "Lessons in Pomology", and "Principles of Plant Culture".

Did Much Pioneer Work

This noted fruitman was very active, throughout his connection with the Wisconsin Experiment Station, in developing the fruit industry of the central west. He went to Wisconsin at the time when the fruit industry was in very poor condition, due, in part at least to the introduction of a great number of eastern varieties which were not sufficiently hardy for the Badger state.

This pioneer horticulturist interested himself in developing hardy varieties. And with this aim in view, he brought in to his adopted state those varieties he thought suitable and valuable. These he grafted on to others to produce those of a more hardy nature.

Discovered Door Peninsula

Goff, working in cooperation with another fruit lover, A. L. Hatch, is often credited with the discovery, as a fruit center, of the Door Peninsula (Wisconsin). Having great faith in the idea that the climatic conditions of that county would make an ideal place for fruit growing, these two pioneer orchardists encouraged the planting of the first fruit trees of that county. Their faith and vision created an important industry for the residents of this great fruit area.

At the present time Door county is one of the leading fruit growing areas in this west central state.

PROPOSE PLANT REGISTRATION

AT THE Westchester Convention, held in Greenwich, connecticut, October 15-18, the National Association of Gardeners adopted the following resolution:

Resolved: That the National Association of Gardeners, assembled in convention, favor national plant registration tending towards international plant registration and ultimately the patenting of plants; that the association be the instigator of this movement in the United States and get in touch with all other societies; and that the president appoint a committee of three to investigate and work up this project.

The association extends an invitation to the Wisconsin State Horticultural Society to join it in its efforts, believing that all interested organizations should coordinate to accomplish this project, so vitally important for the future advancement of horticulture.

DOROTHY EBEL,
Secretary.

Growing the "Gold Banded Lily"

Lilium Auratum Is the Most Beautiful of All Lilies

FRANK P. GILOTH

This paper was given by Mr. Giloth at the meeting of the Milwaukee Horticultural Society. The requirements for success in growing this wonderful lily are well presented.

LILIUM auratum commonly known as the "gold banded lily" is found together with its hybrids in wild state in Japan. As its name implies it is a white lily with gold bands through the segments and is spotted in variable amount with red dots. The lily itself with possibly one exception, the lilium testaceum, also known as the nankeen lily, is the most beautiful of all lilies. Its fragrance is heavy, sweet and penetrating.

When fully opened, the flower of one of the varieties of lilium auratum, platyphyllum, oftentimes extends 14 inches in diameter. The bulb itself is shipped in heavy quantities to the United States every year from Japan, coming here late in November or December. If properly treated, as I will hereafter indicate, and planted immediately, the loss of bulb will be very light in comparison to what it generally is in this country. The bulb itself is sometimes as large as five inches in diameter, the scales being wide and rounded to the top, loosely laid on each other.

Treatment Before Planting

Before planting, the bulb should be treated in the following manner. It should be immersed for about 20 minutes in semesan, the solution containing 1 tablespoonful of semesan to one gallon of water. Then the bulb should be rolled in a dust of equal parts of semesan and dusting sulphur so that the dust covers it completely and is in between all of the scales. The bulb should then be planted as stated below.

Planting

The bulb, if planted in heavy clay should be set at least 8 inches deep and in lighter soils at least 12 inches deep. It is a lover of peat moss and will appreciate very much a layer of it below and above it, about 3 or 4 inches in each case. The bulb itself should be set so that it is completely surrounded by sand to the extent of 2 to 3 inches. It should be laid sideways in the sand so as to prevent water getting in between the scales and thus causing rot.

The first year after planting, place a heavy mulch such as peat moss, or similar material, at least 3 in., over the ground above the bulb to prevent frost from moving and disturbing it. If the mulch is applied after the ground freezes it will prevent the mice from digging down to the bulb and chewing it up. This will be beneficial during the following summer, as it will keep the moisture in the ground and keep it cool.

Time of Planting

The proper time for planting Lilium Auratum is in the Fall. This gives it a chance to grow roots through the winter and early Spring.

Diseases

Lilium auratum and its hybrids are susceptible to a wound disease "Rhizopas Necans". Whenever auratum or its hybrids are wounded or injured and the proper treatment of semesan solution and the dust above mentioned is not given you will find that the bulb will never, with a few exceptions, come up. It will rot completely, or it will come up for one or two years thereafter and then nevermore. If the following year you were to dig up the bulb to see what happened to it you would either find nothing, or a mass of rot. The soaking in semesan solution for 20 minutes and the dusting takes care of that.

There is another disease which in many ways is even worse than the wound disease. This is known as Botrytis, being a form of Botrytis Scleratima. This attacks lilium auratum and lilium candidum with equal severity, more so than other forms of lilium. It attacks them from the time the first shoot comes above the ground and possibly underground unless they are rolled in the semesan dust previously mentioned. Once they are infected you might just as well cut down the stock as there is no cure for it. You can, however, check it by spraying weekly with bordeaux mixture 4-4-50.

Propagation

Lilium auratum and its hybrids do not split up as does lilium regale but it does form bulbils within its scales and forms bulblets or stem-roots. In this connection I should mention that lilium auratum and its hybrids forms a root system above the bulb or stem anywhere from 4 to 8 inches high above the bulb depending upon the vigor. In these roots you will find on examination when the plant has matured, one or more bulblets tightly fastened to the stem. Lilium Auratum and its hybrids can also be reproduced by breaking off some of the scales and planting them about the same depth as bulblets are planted, about 4 inches in sand with peat moss around them. A good way to form bulblets when the blossom is through is to jerk out the entire

stem and lay it lengthwise in the sand covering it about 3 inches deep. When digging this up in Fall you will find that the stem will have quite a few bulblets on it.

Soil

Lilium Auratum and its hybrids like partial shade and prefers a sour soil to a sweet one. If your soil is not sour you can make it so by use of alum. They are gross feeders, possibly more so than any other lily and for that reason they would appreciate having rotted manure under and around the peat moss and sand. Also just before blossoming, a liberal application of liquid manure would be not only greatly appreciated but promptly and fully repaid.

Blooming

The plant will grow as high as 6 feet under proper conditions and oftentimes the stem is too heavy to stand the winds. For that reason it will be necessary to stake it immediately when the shoot comes out of the ground to prevent breaking.

Varieties

Lilium Auratum Platyphyllium is stronger and more vigorous than this type, and is similar to auratum except that the color differs in that the red spots are more pronounced and the gold bands on the segments are brighter.

Lilium Auratum Virginale and Lilium Virginale Albums are weaker, being almost pure white with very faint gold bands and spotting.

Lilium Auratum Pictum is also weaker and has less gold in it and more spots.

Lilium Auratum Vittatium is similar but smaller in growth and has red lines throughout the gold bands.

Lilium Auratum Wittie is similar to the Virginale except that its leaves and flowers are shorter and broader.

Advertising Our Apples

C. L. KUEHNER

Five Counties put up this fine exhibit at the "Food Show".

THE purpose of the Apple Exhibit at the Milwaukee Journal Food Show was:

1. To show Milwaukee people that Wisconsin does produce good apples and that they can be secured from orchardists within short driving distance of their homes.
2. That apples can be used in many different ways both in main dishes and for dessert dishes.
3. That various apples have different qualities, flavors and uses and that they furnish the body with certain definite health giving food elements.
4. That apples are economical to use.

Counties Concerned

Five counties cooperated and each furnished a total of fifty trays of apples for the display. R. B. Pallett, Milwaukee County, Guy S. Hales, Ozaukee County, J. F. Thomas, Waukesha County, E. D. Byrns, Washington County and Hugo G. Klumb, Racine County School of Agriculture, helped to arrange and attended.

Plan of Display

Each County Agent placed his own display. He also marked each tray with the farmer's name for the benefit of the visitors who might desire to buy some fruit. The County Agent also remained in attendance to make sales contacts for his orchardists who produce good apples. Thousands of contacts were made.

Plates of named Wisconsin Varieties of apples were placed on a large shelf attached to the tray exhibit and these indicated the six most common cooking apples and six most common eating apples.

Another plate display identified the various varieties. Correct names were attached.

A Wealthy apple display from different counties of the state was another one of the interesting features. They were all good no matter from what part of the state they came.

Apple dishes for the home.

Daily demonstrations by Evelyn and Marion Kienzle, two 4 H Club girls from a farm near South Milwaukee under the direction of Helene French, Milwaukee County home demonstration agent. These demonstrations attracted much attention and praise.

Literature distributed.

a. Apple Recipes.

b. Information on seasons of different apples.

c. Storage of apples.

d. Use adaptations of different varieties.

This was probably the best

and most successful farm orchard apple demonstration Wisconsin has ever had. Five counties demonstrated conclusively what they have accomplished in orchard improvement work carried on under the direction of the Horticulture Department of the University of Wisconsin. Much credit for the big success of the the undertaking belongs to R. B. Pallett, County Agent of Milwaukee County and to County Agent J. F. Thomas, Guy S. Hales, E. D. Byrns, and Hugo G. Klumb of the Racine County School of Agriculture.

DON'T KILL BIRDS

Mr. Rahmlow:

I was surprised that anyone should think seriously of killing birds for any reason, when such strong reasons exist for protecting them. They are disappearing so fast, they have so many enemies and we need their work so much. I wonder if Mr. Schwartz knows that our food largely depends upon the work of birds. I read once that if all bird life should be destroyed, man would perish too.

I have grown to think all birds are needed. I used to think chicken hawks should be destroyed whenever possible. but I have learned since that their work is needed too, in destruction of mice. I used to think crows should be killed, till I saw somewhere that the Canadian farmers say their greatest help in fighting the European Corn borer is the crow. Also crows destroy cutworms. I think all birds do some good. Can't Mr. Schwartz plant some extra trees to feed the birds?

Respectfully,
MRS. A. C. HOLLISTER,
Mukwonago, Wis.

The potato crop in the United States was estimated at 465,000,000 bushels as compared to 407,000,000 bushels last year.

HORTICULTURAL NOTES FROM NORTH DAKOTA

By SECRETARY A. F. YEAGER

THE Potato Association of America reports that potatoes should be kept at temperatures of 50 degrees or slightly above the first few weeks of their storage period. If the temperature is lowered to 40 degrees or less immediately, cut surfaces will not heal readily and decay may set in. After the first month the temperature of the potato storage house should be maintained at from 36 to 40 degrees.

The Pacific Rural Press states that a duck or two among shrubs and flowers will soon reduce the snail population.

Mr. Nyden of Hebron says he has tried both fall and spring planting of roses and prefers fall planting because it is easier to get live plants from the nurseries. On the other hand I believe Dr. Aylen prefers spring planting in order that the trouble of carrying the plants through the winter may be saddled on to the seller of the goods.

Fall mulching of shrubs and fruit plants which is often necessary in order to bring them through the winter provides a harboring place for mice. If trees are mulched it is always well to see that the trunk is protected by a collar of screen.

The eating of rhubarb leaves may kill livestock says Mr. Hansen, of the Indiana Experiment Station.

When you are thinking about taking plants into the house remember that the average house has air which is three times as dry as the Sahara Desert. It is, therefore, necessary to look carefully to the watering and to keep the plants in as cool and as moist an air as possible at least to begin with. Also be sure that the leaves and stems are free from all insects. It is much better to leave them outdoors than to bring them inside and have a continual battle all winter.

In storing celery for winter we prefer to dig up the plants with dirt on the roots and set them close together in a pit. covering when necessary to prevent freezing, until such time as severe cold weather comes on, then move to the basement or cellar. Plants dug fresh from the garden and moved to the cellar without time to callous in a pit are likely to wilt and never recover.

Scientists claim that dried apricots have proven effective in increasing the number of red blood corpuscles in much the same way as liver. The discovery that liver was effective in such cases resulted in doubling and trebling of the price. It may likewise affect apricots.

PARIS GREEN KILLS MOSQUITOES

Paris Green mixed with fine dust in the proportion of one part to nine by weight, blown as a powder over the surface of bodies of water, will kill such mosquito larvae as feed at the surface of the water, says the Bureau of Entomology. On large areas airplane dusting has proved effective. At Quantico, Va.. last year the material for dusting a considerable area of salt marsh cost 72 cents an acre and gave effective control. On small ponds a hand dust gun may be used. Petroleum oils with or without the addition of various other substances, and drainage of breeding places, continue to be the main reliance for control of mosquitoes.

—FROM "HORTICULTURE".

Peony Varieties and Prices

Papers Presented Before the Milwaukee Horticulture Society at Their November Meeting

Submitted by I. J. SCHULTE

MR. W. A. SISSON of Rosendale was the outside speaker at the November meeting of the Milwaukee club.

Mr. Sisson stated that the price of a peony is governed or influenced by three factors or in three ways: by the introducer, the grower, and the people, but that the people are the final judge. The larger the introducer or grower the higher the price that can be asked and the longer the time such high price can be maintained. He mentioned one large grower who introduced a dozen or more peonies in 1925, and anyone who bought roots of these peonies had to make a contract to maintain a price of $50 a root for seven years or until 1932. Naturally at this high price the increase will remain largely in the hands of the growers most of the time, and at the end of the seven year period there may be such a large stock on hand that the price may drop out of sight.

My own thought in this matter is that no grower or dealer need fear that an introducer will bring suit for breach of such a contract for it is clearly contrary to public policy and apparently in direct violation of the federal trade commission act.

Mr. Sisson brought a number of peony roots with him, and in discussing what constitutes a natural division and to demonstrate how roots should be divided he had to get up on the table for the interested members were crowding him and those in the rear could not see. He said that the number of eyes in a division have nothing to do with the proper size of the root for some of the eyes may not come up. Buyers should look for a good root system.

Mr. Sisson's talk was so delightfully entertaining that other garden clubs have a treat in store if they have not already had him on one of their programs. We are sure we will want to have him with us again.

Kinds and Varieties of Peonies

Miss Mabel Thoms

The peony has been known in China for more than a thousand years, where, beginning as the wild species, P. albiflora, it gradually spread throughout northern China and was cultivated for medicinal use and for food as well as for garden ornament. We do not think of the peony as a medicinal plant, but our forefathers had a faith more like the Chinese in the curative value of plants, as Hill's British Herbal of 1756 claimed for the peony (P. officinalis, no doubt) that it alone would cure that disagreeable disorder, the nightmare. Mrs. Edward Harding writes in The Book of the Peony that in 1850 an English nurseryman began a collection of the albifloras, among which was Edulis Superba with edible roots.

There are between eighteen and twenty-five species of the peony, which are classified under two divisions—herbaceous and tree peonies. The herbaceous peonies are plants two to four and a half feet high that die down to the ground in the autumn.

Tree peonies or P. Moutan have a shrub-like habit and a permanent woody growth that does not die down to the ground. The Chinese esteemed the tree peony very highly, and it was called by them "The King of Flowers," while the herbaceous were the King's Ministers. Although hardy, tree peonies are difficult to propagate and increase is most generally made by grafting on herbaceous roots. The tree peony usually reaches a height of three or four feet, and its flowers are remarkable for their beauty of form, texture, and color combined. The manual of the American Peony Society just recently published gives full cultural directions for growing the tree peony. There are as many named varieties and colors, single and double, among tree peonies as are found among the herbaceous or albifloras.

P. Lutea is a shrubby species with handsome foliage like that of P. Moutan but more finely divided. The flowers are bright yellow, very fragrant, two to four inches in diameter. The plant is hardy but in northern regions is apt to die back to the ground each winter, and is thus practically herbaceous in habit. There are a number of hybrids crossed with P. Moutan which are of high merit.

P. Tenuifolia or fern leaved peony is the earliest of the herbaceous peonies to bloom, about a month ahead of the earliest Chinese varieties. It is a native of the Ukraine, Russia, a region north of the Black Sea, and comes in both single and double varieties. The plant is sixteen to eighteen inches high, and a few weeks after blooming the foliage dies down to the ground, disappearing until the following spring. The flowers are red.

P. Wittmaniana and its hybrids follow closely after Tenuifolia in order of bloom. P. Wittmaniana and P. Mlokosewitschi are the only known herbaceous peonies having yellow flowers. Wittmaniana is not grown here very successfully and for some unknown reason often dies out. The Wittman-

ana hybrids, however, are very hardy. Lemoine, with French hybridist, has made crosses with various Chinese varieties. They have large, fragrant, single flowers and thick leaves of vigorous and luxuriant growth. Le Printemps, a yellowish cream, Mai Fleuri, salmon white, and Avan Gard, pale rose, are considered very beautiful.

P. Officinalis, the old fashioned double red piney, has been known in European gardens for centuries and gave the peony its name. There are single and double types in white and red, although the double red, Officinalis rubra plena, is the one best known.

There are a number of other peony species but these are not well known to American gardens except to plant breeders and botanists.

From Peony Albiflora are descended most of the varieties of the modern herbaceous peony. Roots of the peony were brought to England from China about the beginning of the nineteenth century. From England it passed over the Channel into France, and it is in France that the real history of the modern peony begins. A number of French gardeners raised peony seedlings in the early part of the nineteenth century, and some of these old varieties are still found in peony lists. Festiva Maxima, originated by Miellez in 1851, has a rating of 9.3, and it is the equal of many of the modern first-class peonies of today. Edulis Superba was originated by Lemon in 1824 and is over a hundred years old. Although it has a rating of only 7.6, it holds the affections of many because of its earliness, deep pink color, and fragrance. In America, Brand, Richardson, Thurlow, and other peony growers have produced a number of fine, high class seedlings.

Our modern peonies show a wide variation in form as well as color, and so they have been classified into different types as single, double, Japanese, and rose. Many peony lists describe bomb and crown types, but Mr. A. H. Fewkes in the manual of the American Peony Society does not like the term as there is very little difference between the two and some varieties listed as bomb produce a crown. He thinks that peony types could be reduced to five at most: single, Japanese, anemone, semi-double, and double.

The single type is a flower with five or more petals around a center of stamens with pollen-bearing anthers. La Fiance, or The Bride, a white single, is probably one of the best known of this type. Two very fine pinks are Helen and Pride of Langport. Vera is a dark maroon-crimson.

The Japanese type is really a double form, but it has arrived at its goal in a much different manner than the other double forms. This also has a single row of guard petals, but instead of bearing pollen the stamens have become greatly enlarged. They are narrow and thick and of various colors, and are often described as filamental petals or petaloids.

There are so many fine Japanese peonies that it is difficult to choose among them. Mikado is a crimson Jap which was first introduced to this country at the Chicago World's Fair in 1893. Fuyajo is a very striking dark purplish crimson, with a center of the same color as the guard petals but tipped with buff. The finest white Jap is Isani Gidui. The highest rated of all Japs is Tamate Boku (9.4). It has enormous cupped petals of dark old-rose-pink and a center of gold and pink stamenoids. Tokio is a less expensive variety which resembles it closely.

Primevere, a white peony with center of canary yellow, is an example of the anemone type. Another is Philomele, an old variety with a three color effect—dark, old-rose guards, yellow collar, and tuft of old rose in the center.

Then we have the semi-double like Marie Jacquin, often called the water lily peony. La Rosiere is also a fine example of this type. It is a beautiful white peony which blooms in clusters of three to five and should not be disbudded since it is the cluster which makes it unique among peonies.

In June while visiting at Sisson's Peony Farm, Rosendale, Wisconsin, I had the pleasure of seeing Minnie Shaylor, a semi-double, light pink peony, which I admired very much. It had golden anthers, green carpels, and crimson stigmas in the center, which reminded me of nothing else than the yellow center of a poinsettia flower.

Every one is familiar with the double type. Some full doubles still show a trace of stamens but these are hidden among the thick mass of petals. Festiva Maxima, white, Edulis Superba, pink, and Felix Crousse, red, are the three oldest and best known varieties among the doubles which ought to be in every garden. Karl Rosefield is even better than Felix Crousse and does not cost much more. Mons. Jules Elie has large guard petals and an immense ball of incurved petals like a chrysanthemum. Duchess de Nemours is another very good white among the older sorts. A few of the finest modern peonies are Le Cygne, 9.9, and Kelway's Glorious, 9.8, both white; Lady Alexander Duff, 9.1, light pink; Sarah Bernhardt, 9.0, a beautiful late pink; Therese, 9.8, one of the loveliest pink peonies; and Philippe Rivoire, 9.2, the only red peony which is fragrant.

There are such a number of excellent varieties among the doubles that it is really impossible to select any certain ones as being the best. There are early and late kinds. Peonies are rated on a scale of ten. Any peony rated above 8 is good. Everyone can select his own favorite to suit personal taste and purse by selecting those above 8 and not go far wrong.

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S. H. S., Madison, Wis.

Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. B. Goff.....Sturgeon Bay
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
George M. Moseman.....Menomonie
W. E. Spreiter.....La Crosse
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

OUR COVER PICTURE

Prize Chrysanthemum named for Hoover's Granddaughter. Miss Alva Louise Ridgeway of Washington, photographed with a beautiful specimen of the Peggy Ann Hoover chrysanthemum, which was named for the little daughter of the President elect, by Mrs. William Jardine, wife of the Secretary of Agriculture, at the annual "Mum" show of the Department of Agriculture at Washington. Photo by Underwood and Underwood.

NOTES BY THE EDITOR

A YEAR rolls around very quickly indeed and we have begun our second year of editing WISCONSIN HORTICULTURE. The work has been a pleasure; it was made so by the generous cooperation we have received from everyone connected with the Society.

We have tried to make the magazine of value to you—have tried to get articles on horticulture that might help you with your problems, and also some of the horticultural news of the state.

After a year of work with the Society, many problems have presented themselves. Raspberry and strawberry growers are asking for help on fertilizer and variety problems, apple growers have cultural and marketing troubles; then the amateurs are organizing into garden clubs and horticultural societies with the commendable aim of civic improvement and developing gardens of their own. Vegetable growers have not been given much aid and their problems demand attention.

President Leverich expressed very well recently what the principal work of the Society should be for the coming year—helping local Horticultural clubs carry on their various functions and give aid to all members through the magazine.

One of the methods of giving aid to local societies will be by holding meetings in different sections of the state where there is a membership to warrant it. These meetings will be specialized; a strawberry meeting in a strawberry section; an apple meeting in a fruit growing section and a garden club meeting for those interested in the amateur side of Horticulture.

We will be only too glad for suggestions along this line and assure our members that aid will be given wherever possible.

BY THE time this issue reaches our members the annual convention will be over. No convention news is possible however, as the magazine is being printed and mailed during convention week so as to be out by our regular mailing date, the 10th of the month.

In the January issue we will give some of the convention proceedings and some of the leading papers.

To date all indications point to a big meeting and show. Twelve counties have entered the County Fruit exhibit class. The Milwaukee Florists will put on a real flower show, and a good vegetable and individual fruit show is assured. It is the first time a garden club program has been staged, but we are anticipating good results.

To those of our readers who were unable to attend we hope to give most of the papers during the next few months.

IF YOU haven't met your County Agent drop in and see him some time. The County Agents are no doubt the greatest single force for carrying Agricultural information to those on the firing line—the farmers, that we have today. Furthermore, they are willing cooperators.

During the week of December 5–9 the Wisconsin County Agents held their annual convention at Madison. All types of Agricultural problems were discussed, also methods of doing extension work. The Boys are well trained to do their work—give them your cooperation.

PAINT ON PRUNING CUTS

IN ANSWER to the question as to whether an asphalt base paint gives good results on pruning cuts, Professor T. J. Money of the Iowa Station writes as follows:

"The asphalt paint gives excellent results when painted on

pruning cuts. I have used the Elastigum paint, put out by the Barrett Company, for a number of years for this purpose. The Sherwin–Williams tree paint also seems to be excellent for this purpose. Oronite of the Standard Oil Company, California, is a paint with an asphalt base. and it is also a good one for pruning wounds."

"GIVE the grass a chance" is a good wording for signs asking people not to walk across lawns, suggests one of our readers. It has a much stronger appeal than the usual "Keep off the grass".

Even the single word "Please" had the desired result on one lawn where a path had been worn right around the "Keep off" sign.

A path worn through the snow this winter will show up on the grass next spring and summer.

CONVENTION VERY SUCCESSFUL

JUST as we go to press we are able to make a brief report of some of the leading premium winners at the convention at Milwaukee.

In brief at this writing—the second day, we can say the convention was very successful.

The attendance was good, the fruit show according to some of the oldest members, the best ever shown in both quality and quantity.

At the garden club section it was voted to organize a state Federation, to affiliate with the State Horticultural Society. Further details next month.

We have some interesting papers given at the convention which will be run beginning next month.

The following are some of the leading premium winners. The judging has not been completed so the details will be given in January.

The Milwaukee Journal Cup for the Best County Fruit Exhibit.

SILVER TROPHY AWARDS

Best County fruit exhibit: Dane County, silver cup by Milwaukee Journal.

Best tray McIntosh: Kickapoo Development Co., Gays Mills, Boston Store silver fruit bowl.

Best tray Wealthy: N. A. Rasmussen, Oshkosh, Milwaukee Kiwanis Club silver fruit bowl.

Best three trays of apples: A. K. Bassett, Baraboo, Milwaukee Kiwanis Club silver fruit bowl.

Best basket cut flowers: Locker & Sons, Milwaukee, Milwaukee County Horticultural Society silver vase.

Other counties winning: 2nd, Sauk County; 3rd, Milwaukee County; 4th, Grant County; 5th, Rock County.

Other counties exhibiting: Washington County, Door County, Waukesha County and Jefferson County.

SINGLE TRAY WINNERS

A. K. Bassett, Baraboo, won first on the following: Northwestern, Fameuse, Windsor, Wolf River, Westfield, Tolman Sweet.

N. A. Rasmussen of Oshkosh won first on Delicious, Fred Kurtz of Port Washington on Salome, John Koehler of No. Milwaukee on McMahon.

The flower exhibitors and winners were W. C. Pagenkopf, first on Yellow "Mums", Locker & Son first on Single Pompoms and Double Pompoms, Kennedy and Kennedy, first on carnations, Holton & Hunkel first on light pink roses, dark pink roses and any other roses, three cyclamen plants and begonias. Kennedy and Kennedy had the best Boston Fern, John Hauser of Bayfield first in display of everlasting flowers, Locker & Son had the best arranged basket of cut flowers, C. E. Dettman being second. Other winners will be given next month.

MANITOWOC COUNTY HOLDS HARVEST FESTIVAL

By C. L. KUEHNER

THOUSANDS of Manitowoc County farmers' families flocked to the County Court House on November 14, 15 and 16 to see the farm products exhibits which had been brought in for display from all parts of the County. Both the first and second floors were filled up with exhibits of apples (about 500 plates), vegetables, grains and school and 4 H Club exhibits.

The apple display was brought in from the orchards of Manitowoc County's seventeen sprayrings and from the county school township contests which had been held preliminary to the big show at Manitowoc. It was a splendid effort in the right direction as more than 1200 country boys and girls had the opportunity to visit the exposition and also hear Mr. W. McNeil from the college.

On the afternoon of each day, separate sessions were held for men and women. Mrs. Osborne from the Home Economics Department of the College assisted Mr. Smith with the womens meetings.

The mens meetings consisted of demonstrations and lectures on farm topics. Mr. G. Briggs, Mr. Schaenzer, County Agents Lathrope and Mathisen all addressed the men. The writer talked on "The Care of the Farm Orchard" and also discussed the subject of "Wiscon-Apple Varieties for the Housewife" before a group of about 80 women from all parts of Manitowoc County.

This exposition was planned and executed cooperatively, by the County Agent and the Superintendent of schools of Manitowoc County. It was a splendid idea, which may deserve to be copied in other counties.

About the Home and Garden

MRS. C. E. STRONG, Editor 80th and George St., West Allis

MAKING GOOD FLOWER SHOWS BETTER

"A flower show for every city in Wisconsin." Can we hope to attain such an ideal? In this article Mrs. Strong gives some essentials for success.

IT HAS been said,—"Flower shows are possible and successful because of the inherent characteristic in every normal person to enter into competition with his fellow men, and the greatest good comes from such exhibitions only when knowledge and care have been exercised by those in charge in planning the exhibition so that all competitors will be assurred of fair and equal treatment."

If we plan our flower shows months instead of weeks beforehand, there will be ample time for all those little details that make a better show out of a good one.

You will have time to remember that there may be many who are just beginning to grow flowers; who are interested in a flower show, yet do not know how to prepare flowers for exhibition. When the entry list therefore, is sent out to prospective exhibitors, a few simple directions are sent with the list.

These directions along with the entry list may be posted up in stores, post-office, banks, school-houses, of course there is a cordial invitation to readers to bring choicest blooms to the flower show.

Stress the fact that quality, not quantity, is the keynote of a good flower show. Look over your flowers carefully—if you have fifty blooms and only ten are perfect, in your opinion, take those ten—do not add even five more, in order to have a mass effect.

If you have ample time, you will try to secure a place where the flowers may be displayed to the best advantage, not crowded, even though there is to be a large exhibit.

There will be time to be sure that there will be a competent person in charge of the entry book, that there will be assistants to see that all exhibitors have a number and all exhibits are properly tagged before being delivered to those who have charge of placing the display.

If all classes are given a special place, the Judges will never forget your show, it will be given a red letter place in their memory book.

The entry book if properly kept with names and addresses and the exhibits, will be of great assistance in future shows.

There should also be some one to take care of those last minute exhibitors who *just happened to hear of the show* and bring flowers—some times most exquisite ones—that do not quite fit in any class.

These exhibitors must always be encouraged—not discouraged as they some times are because no one really has the time to place the flowers, or explain the show so they will understand that they are welcome and be able to do better another year.

I feel that all flower shows are better where there is just friendly earnest competition—unmarred by any thought of prizes. I am speaking of Garden Club Flower Shows, where every one in the community is asked to exhibit. Too many times has it been said: "Oh what is the use of me exhibiting—so- and- so with the big garden will get all the prizes anyhow."

But if they feel the show is a community affair, that a single vase or basket of flowers will add to the beauty of the show, gladly and proudly they will do their part.

Naturally even a good flower show will be better when every flower grower in the community takes personal interest and pride in adding at least a few blossoms to the show.

Then to me any flower show is better if there is a demonstration on some phase of floriculture given by children trained by members of the Club. It creates a lasting impression on the minds of those present as well as being of great value to the children.

Given time, thought and care, we may all have better flower shows.

SUCCESS WITH AMARYLLIS

Dear Mrs. Strong—I wrote you some months ago of my little seedling Amaryllis plant and also, I think. of some fine little Cyclamen plants also grown from seeds. The Cyclamen plants are about one and a half years old now and two of them are budded.

The Amaryllis grows strong and thrifty and is growing some little bulbs beside it, but as yet is not budded.

I wonder if many know how reliable the petunia is for winter blooming. I know of nothing, except the begonia, that is so sure to blossom in the winter time as a petunia.

Last winter I had a big ruffled pink and white one that was a joy for months.

The Impatient Sultani is another very dependable house plant and so cheerful and bright.

ALURA C. HOLLISTER,
Mukwonago, Wis.

Thank you, dear Mrs. Hollister for remembering to tell us about your plants. I too am watching some seedling Amaryllis plants, hoping to see some buds appear.

If you like to try out new plants, the African Violet, Saintpaula is a charming house plant, the leaves are similar to the Gloxinia. The blossoms are clusters of dainty violet like flowers, it is in bloom almost constantly and is really a worth while plant.

Come again and tell us about your garden, indoors and out, it will help us all.

NEW BOOK ON PEAT MOSS

"Gardening with Peat Moss" by F. F. Rockwell and W. G. Breitenbucher is a new book on the subject of peat moss just published by Atkins & Durbrow, Inc., 29 Burling Slip, New York. A great many people are interested in the use of peat moss and this book may be of value to them.

Wisconsin's apple crop this year is estimated at 2,158,000 bushel as compared with 1,200,000 bushel a year ago. The quality this year is better than that of last year.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

LEAVES USED AS FERTILIZER

Soil is Replenished by Three-Year Product of Parks

"WASTE not a single leaf" is the order to park workers from City Forester O. W. Spidel.

Leaves, he said, have become a thing to be desired in the city's parks, the boulevards and the yards. They must be converted into fertilizer for the replenishment of the soil.

Farmers surrounding Milwaukee are paying a better price than the city for the manure that is still to be had.

Must Be Fertilized

O. W. Spidel, city forester, said the soil must be adequately fertilized if it is desired to obtain crops. The fallen leaf has become the chief fertilizing agency of the modern day, he said.

Heretofore ward foremen carted gutter leaves in large quantities to a public dump to be burned. This year a mountain of leaves has been collected at the northeast end of Lake park, chiefly the rakings from streets, and in three years will have become an excellent fertilizer.

Pile Turned Over

Lime is applied to the leaves. also a quantity of mulching, and the mixture soon becomes a pile of mulch. The pile is turned over at stated periods and if the rain does not fall in sufficient quantity a park hose is applied to the assembled leaves. They must be kept wet, so that disintegration proceeds faster. Lime will help and in about three years the leaves scraped from the street and raked from the parks will have become a pile of fertilizer.

The milogranite sold by the sewerage commission is an excellent fertilizer for park earth. the city forester said, but it is expensive. Leaves are just as good and much cheaper, he said. In each park a mulching ground is to be set aside.

—MILWAUKEE JOURNAL.

HOW MANY GLADIOLUS VARIETIES?

AS A result of a recent survey it has been determined that there are 2500 varieties listed by gladiolus growers in the United States this year. Approximately 50% of this number are offered for sale by one grower only. Not more than one-third of the total number of varieties are really established in the trade. This situation is quite comparable with that of the iris, peony, rose, and the phlox, although there are 25% more varieties of gladioli than of iris, peonies or roses.

The varieties of gladioli listed most frequently are:

Name of Variety	No. times listed by 250 growers
Alice Tiplady	184
America	158
Anna Eberius	173
Baron Joseph Hulot	152
Byron L. Smith	131
Crimson Glow	166
E. J. Shaylor	168
Evelyn Kirtland	185
Golden Measure	128
Gretchen Zang	113
Halley	189
Herada	174
Le Marechal Foch	162
Lily White	101
Louise	110
Maiden's Blush	106
Mary Pickford	115
Mrs. Dr. Norton	175
Mrs. F. C. Peters	119
Mrs. Francis King	185
Mrs. Frank Pendleton	188
Mrs. H. E. Bothin	112
Niagara	100
Panama	134
Peace	152
Prince of Wales	158
Purple Glory	138
Rose Ash	148
Schwaben	178
Souvenir	106
War	112
Wilbrink	113

—ALFRED M. S. PRIDHAM.
Cornell University, Ithaca, N. Y., In *"Horticulture"*.

Garden Club Activities

PIERCE COUNTY SOCIETY PLAN'S YEAR'S PROGRAM

THE following is the coming year's program for the Pierce County Horticultural Society as sent in by the President Mrs. Alvin D. Hurtgen of Spring Valley. This program may serve as a suggestion to other clubs.

January

Wild Flowers—
- Native—where obtained and points in regard to soil, shade or sun.
- Not native—where seeds can be procured.

Rock Gardens—
- Location.
- Rock steps for undulating ground.
- Paths.
- What plants are suitable etc.

Water Gardens—
- Building of pools, utilizing natural springs, pools or streams.
- Plants suitable for same.

Formal Gardens—
- What shrubs are suitable for background.
- Garden furniture.
- Trellises and vines.

What shrubbery and trees make best winter showing.

Discussion of work that may be done by school children.

Bulletin—Helpful hints and suggestions in regard to gardening given for roll call by each member present each month and printed in local paper.

February

The time when seed catalogs are issued. Order seeds.

Plant such seeds as require long growing season, viz.—dahlias, stocks, snapdragons etc.

Discussion of lilies—
- Hardy etc.
- Drainage, soil and sun requirements.

Ordering of such bulbs in large quantities as can be used by organization.

Making of cold frames and ways to utilize window space for seed boxes.

Planting for succession of bloom.

March

Gladiolus—
- Varieties.
- Planting time.
- Soil requirements etc.

What seeds to be started at this time—
- Salad vegetables, tomatoes.

Ordering of shrubbery, plants and bulbs in quantity as can be used by Society.

Exchange of surplus stock of seeds etc. planned at this meeting.

How to encourage birds to the home grounds.

Discussion of wild or native shrubbery and trees for home beautification.

April

- Bird house contest.
- Exhibition of stuffed birds.
- Talk on native birds with bird imitator if possible.

Berries—
- Varieties (hardy).
- Soil methods of planting vegetable novelties.

May

Plans for early summer flower show discussed.

Trips to gardens and natural beauty spots within reach planned.

Iris—
- varieties.
- Color and height.
- Rating and Soil requirements.
- Disease and insect pests.
- Remedies.
- Use of native weeds for greens and salads.

June

Methods of lighting gardens.

Roses—
- Hardy, half hardy and tender.
- Climbing.
- Winter protection, diseases, insect pests and remedies.
- Cut flower arrangements.

Starting cuttings of dahlias, shrubs, roses etc.

July

Annuals—
- Best varieties for continuous bloom.
- Novelties.
- Dry and heat loving.

Pilgrimages to gardens and natural beauty spots discussed.

August

- Arrangements for late flower show discussed.
- Best plants for August bloom.
- Watering and saving seed.
- Dust Mulch.
- Plants to be divided, viz.—iris, oriental poppies etc.
- Discussion of plans for exhibition for county fair.

September

Protection against early frost.

Peonies—
- Planting.
- Varieties.

Winter Bouquets—
- Varieties of everlastings.
- Method of curing.
- Arrangement.

October

Tulips and other fall planted bulbs, viz.—narcissus, hyacinths, etc.

Ordering in bulk.

Michaelmas daisies, perennial, hardy chrysanthemums.

Getting houseplants ready for winter.

November

Storing of fruit and vegetables.

Bulbs—winter protection of plants.

Preparing for next spring's hot bed.

December

Plants and bulbs for Christmas presents.

Living Christmas trees.

Holiday decorations.

Feeding the winter birds.

LILIES DISCUSSED AT MILWAUKEE SOCIETY MEETING

By FRANK P. GILOTH

THE October Meeting was devoted to the topic of Lilies. The Meeting was opened by the reading of a Poem, "Why I Plant a Garden" which was read by Miss Berger.

Mr. Huron H. Smith, our President, gave a talk about the meeting held for the purpose of forming a Federation of Garden Clubs for Wisconsin. We were informed that such a Federation was organized, and there will be some discussion and a place on the program of the State Horticultural Society at its December Meeting to be held in Milwaukee.

Our President also informed us that the City of Milwaukee would prepare a place for an Iris display. The Rhizomes will be furnished by Mr. Schrimer of St. Paul.

A discussion on Lilium Auratum was given by Frank P. Giloth. A very interesting talk on Lilium Regale was given by Huron H. Smith, followed by a discussion on Botanical Lilies, rare varieties, by Mr. Louis Potter. Mr. Zabel gave a talk on Lilium Tigrium. followed by Mrs. Pfaff who talked on Lilium Henri.

As usual the evening was not long enough for our program.

HALES CORNERS CLUB VISITS "MUM" SHOW

By MRS. ARTHUR W. JOHNSON

The November meeting of the Hales Corners garden club was held at the home of Mrs. Arthur W. Johnson on the afternoon of November 9, 1928.

Several cars were provided and all the members of the club drove in to the Mitchell Park Conservatory to see the Chrysanthemum show. The greater part of the afternoon was spent in the show rooms and in the greenhouses.

SUM-MER-DEL HAS SPECIAL PROGRAM

By MRS. M. M. DAY

THE Sum-Mer-Del Garden Club of Waukesha County held its November meeting with Mrs. A. W. Rogers of the Oconomowoc Health Resort.

Mrs. Frederick Fisher, President of the Illinois Federation of Garden Clubs had been asked to talk to the club on "Planting for Succession of Bloom" and each member was given the privilege of bringing two guests. Mrs. Fisher, who has had added to her many duties the responsibility of the Chicago Garden Show, gave a very helpful and inspiring talk and at its close showed some delightful pictures illustrating her subject. Later she was asked by the President, Miss M. A. Lowerre, to give a short explanation for the benefit of some interested visitors of how to start a garden club.

At the close of the meeting the Chairman of the program committee, Mrs. H. B. Hitz announced that Mrs. J. C. Finney would speak to the club next month on "Japanese Gardens".

The name of acid phosphate has been changed to "superphosphate" because many folks got the impression that it had a tendency to make soil acid—which it does not.

RACINE CLUB ELECTS OFFICERS

Foreign Gardens Described

FREDERICK C. MEYER was elected president of the Racine Garden club and Mrs. A. L. Schacht was chosen secretary at the meeting held on Tuesday evening in the main library. Retiring officers are Mrs. William Thorkelson and Mrs. H. E. Breckenridge.

Attention was called to the Horticultural society convention to be held in Milwaukee on Dec. 5 to 7. It was decided to continue the meetings fortnightly on Tuesday evening.

Mrs. W. D. Thompson read a paper in which she told of her visit to the iris show, a national event sponsored by the Garden club of Freeport, last spring. Mrs. Thompson also described gardens in the east and in England and Ireland. In the latter countries, she said, gardening is taken seriously. Much time and effort are spent on gardening both as a business and as a hobby and especially in England gardens are places for social groups to gather, both formally and informally.

"In my own rock garden I have ferns from Maryland, dwarf iris and pinks among the many other flowers. Small plants are much more attractive in a rock garden than are the larger ones," Mrs. Thompson said.

"During my visit to Lake Geneva last summer I was impressed by the curtailment of work in many of the erstwhile beautiful and elaborate gardens." she continued. "Intelligent help is hard to get, we are told, and as a result many of the most extensive gardens are being seeded down."

The rapid strides made in gardening in the United States within the last few years Mrs. Thompson accredited largely to the work of the magazines and garden clubs.

—RACINE JOURNAL.

MADISON CLUB VOTES TO JOIN FEDERATION

THE Madison Garden Club, at a meeting in the First Methodist church Thursday night, voted unanimously to enter the state federation of garden clubs proposed at a state wide meeting in Milwaukee on Oct. 3. After an amendment had been proposed by Sam Post

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which describes three kinds of Lady Slippers, the dainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozens of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. TOOLE
Garry-Nee-Dule
BARABOO, WISCONSIN

and adopted by the club it was agreed to enter on these terms:

The dues of the Madison club will, after Jan. 1, 1929, be $1.50 instead of $1.00 annually per member. One dollar will remain, as heretofore, in the local club's treasury, while 15 cents will be sent to the secretary-treasurer of the state federation. The remaining 35 cents per member will be paid to the Wisconsin Horticultural society as annual dues, so that every member of the Madison club will hereafter join the Horticultural society and the state federation at the time he obtains membership in the garden club.

Whenever two or more members of one family are members of the Madison Garden club, only the nominal head of the family, however, will pay the additional 50 cents.

Miss Melissa Brown, vice president, presided Thursday night. Forty members were in attendance. The names of eight new members were presented and accepted for membership:

John Riner, 928 Spaight street; Carl Link, 2244 Hollister avenue; Edwin T. Anderson, R. 3; Miss Frances Post, R. 7; Mrs. Geo. McLean. R. 7; Mrs. Maud Wendt, 1808 Kendall avenue, and Mrs. H. F. Johnston, 2115 E. Mifflin street.

Following the favorable vote on federation, an appreciation of Col. W. J. Anderson, written by F. C. Cranefield, was read by Mark Troxell. Plans were discussed to invite representatives of the Rotary, Kiwanis, and other service clubs in Madison to meet with garden club officers to arrange a plan of flower gardens for children in all the public schools.

—WISCONSIN STATE JOURNAL.

CRANBERRIES ARE GOOD FOR LUNCH

FOR the "hurry up" luncheon or supper the cranberry may be called upon to give a piquant touch at any time of the year, says a newly issued circular from the college of agriculture at the state university. The new publication, Cranberries in the Diet, is packed with many new tested recipes. It will be sent free to Wisconsin housewives who apply for it to the college of agriculture, Madison.

For the hostess who is looking for something different, hot cranberry sandwiches make tempting luncheon dishes that are easy to prepare.

In making these sandwiches, cut enough bread, one-half inch thick, to allow one slice for each person to be served. Cut each piece diagonally and toast. then butter it. Put two of the diagonal pieces on warm serving plates. Brown enough medium thick slices of cold boiled ham in a little fat to cover each piece of toast and lay on the toast. Add two tablespoons of hot cranberry marmalade and sprinkle with grated cheese. Garnished with parsley and served hot, this makes an ideal main dish for the Sunday night supper.

As a variation of the ever popular club sandwich, try a cranberry club sandwich. Lay two crisply fried pieces of bacon on a slice of buttered toast. Heap a large tablespoon of scrambled eggs on the bacon and surround the eggs with a circle of cranberry sauce.

For a more elaborate sandwich, lay the bacon on a slice of toast, spread with cranberry sauce, add another slice of toast, spread with scrambled eggs, and cover with a third slice of toast. Garnish with parsley and cubes of cranberry jelly.

CHARGING ADMISSION AT FLOWER SHOWS

THERE seems to be quite a difference in opinion as to whether it is a good thing to charge admission at flower shows. Some of our leading garden club officers object very strenuously to the practice while others state that it is the only way their club can obtain sufficient funds to carry on the work.

Some garden clubs charge ten or fifteen cents admission at their best show of the season, the other shows being free of charge. In many cases they make almost a hundred dollars at this show.

We would appreciate letters from garden club members stating their opinions on this matter which we would be glad to publish in the magazine. Let us hear from you.

STRAWFLOWERS

In many colors and varieties

Baskets made up $1.50 to $3.50

We mail these anywhere. Add 50c for packing and postage.

HARDY PERENNIALS

200 varieties

Send for Catalog on Strawflowers and Perennials

Chequamegon Flower Gardens

V. E. Brubaker, Mgr.
Washburn, Wis.

Annual Convention of Wis.-Upper Michigan Florists

HURON H. SMITH

A corner of the Flower Show put on by Milwaukee Florists.

THE annual meeting of the Wisconsin-Upper Michigan Florists Association was held at the New Pfister Hotel, Milwaukee, Thursday and Friday, Nov. 1st and 2nd. It was a meeting with a purpose and fulfilled the purpose of florists education, as well as providing an enjoyable social session.

Election of officers is always held at the annual meeting, and the following were chosen for the coming year: President, Henry J. Benz, of the Flower Shop, Racine. Mr. Benz is the president of the Racine Florists Club. Vice-president, James H. Dale, of Hancock, Mich. promotor extraordinary of the Copper Country. Secretary and treasurer were re-elected, Huron H. Smith and Eugene Oesreicher both of Milwaukee. Director for two years, former secretary Alfred Locker, of Wauwatosa. Hold-over director, Aug F. Kellner, of Milwaukee. The retiring president, A. F. T. Lauritzen, of Eau Claire, automatically becomes a director to succeed, Ed. F. Mathewson, of Sheboygan. The association voted overwhelmingly to accept Mr. Dale's invitation to come to the Copper Country for their next summer's convention, the second week in July. A series of twenty views of the Copper Country was shown at the evening meeting by Huron H. Smith, who took them three weeks ago and had them made into colored lantern slides.

THE ANNUAL FALL FLOWER SHOW

It is the perennial marvel of the Milwaukee flower-loving public where the florists get their constant new ideas for their flower shows. When they have helped the Botanical Department of the Public Museum stage thirteen successive flower shows. it seems that they would go stale, but there is ever more interest in these shows. This was the sixth successive fall show and was quite different from the last one. Greater space, more available to the visitor, with an entirely new lay-out, proved a great attraction.

Figures on attendance have not been taken at the last two shows, because it proved a physical impossibility for two men with counters to check the Sunday afternoon attendance. The show opened Thursday noon November first and closed Sunday night, occupying the rotunda of the Museum-Library building and seven rooms on the first floor.

One of the most attractive features of the show was in the entrance rotunda. It was so up-to-date that it interested people. It consisted of four bridge tables of the latest models from the Niss Furniture Company, furnished for a luncheon with the latest in silverware and table service from the Bunde-Upmeyer Company, and accentuated with the best floral decorations and surroundings.

The largest room at the show had some of the choicest decorations. The huge plant group by Holton and Hunkel Co. occupied the center of the room. Around it on several tables were some of the finest basket creations ever seen at a local show and some fine retail made-up work. Conplete table decorations were well done this year. A large banquet table was used by Fox's, Inc. to hold a 12 foot garland of fruits and flowers. This was the most elaborate piece ever conceived at any of our shows and was a constant marvel to the visitors. Along the aisle in the same room past the groups a long table was given over to carnations and the newer creations in pompons and mums, sent especially by Elmer D. Smith for

HEADS FLORISTS

Henry Benz of Racine, new President of State Florists Association

the Wisconsin Upper Michigan Florists to see, and afterwards transfered to the Museum Flower Show.

The rear elevator rotunda was transformed with a woodsy scene in native evergreens, some of them twenty feet tall. Bittersweet and a regular forest floor contributed to take the visitor to pleasant vacationland in his memories. The rock garden this time was given a natural setting on the floor of the historical group room. With varieties of sheet moss and plenty of weathered rocks, it attracted much attention from a public in this city that is going strongly into home rockeries. The decoration of the show was all done by that master-hand, Aug. F. Kellner. The chairman of the flower show committee of the Milwaukee Florists Club was Alfred Locker, and his committee were: Lindor Maletzke, Erwin Preuss, Oscar Golin, Huron H. Smith, Mike Kochanski, Jerry Petroviak. Richard Lietz, Hugo Schwann, and Waldemar Fleischer. Following the show all exhibits were given by the florists to the Veteran's hospital at Resthaven, Waukesha, Wis.

A new feature this year in the next large room was a formal wedding scene, staged on the elevated platform formerly used for the rock garden. All accessories, on a greensward, rising gently at the rear and embowered with Cibotium scheidii, held an unfamiliar scene for many visitors. About ninety per cent of the visitors judging from comments had never attended a formal wedding and some thought it was a funeral arrangement. It was all in white, however, and the shower bouquet by Mary J. Skinner was one of the finest we have ever seen.

The Colonial village was transformed with modern furniture and table accessories, based upon colonial patterns, and contributed to the florists show by the Niss Company and Bunde–Upmeyer Company. It made a fitting conclusion to a fine show.

Reprint From The Milwaukee Journal

Some of the Calla Lillies at the Flower Show at the Milwaukee Public Museum.

MILWAUKEE SOCIETY DISCUSSES THE PEONY

THE regular monthly meeting of the Milwaukee County Horticultural Society, with a full attendance, was held on November 27 at the Public Museum. Our secretary, Miss Krienitz, who has been ill for some time, was not able to be present, nor was our vice-president, Mr. Giloth. So I was conscripted by the president to act as secretary pro tem for the evening.

The chairmen of the various convention committees made their reports, and the regular

program of the evening was opened with a poem of her own composition by Mrs. C. E. Strong, entitled "The Garden of My Dreams." I am enclosing a copy of this poem since its beauty should again find a place in the magazine.

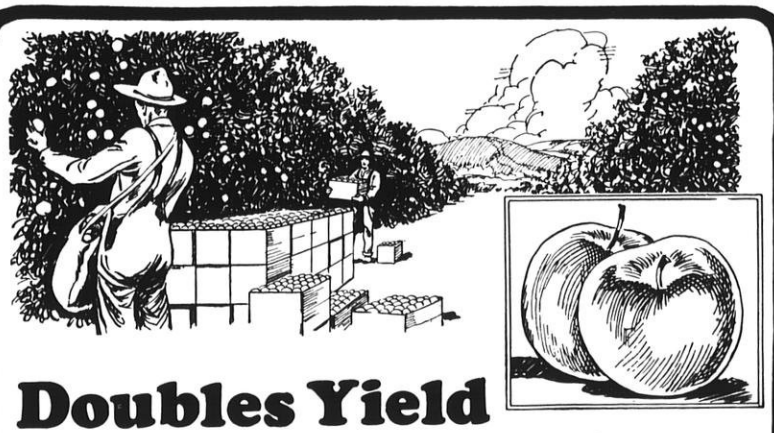
The topic of the evening was the peony, and the first speaker, Miss Mabel Thoms read an interesting paper on the history and the varieties and kinds of peonies, in which she mentioned that the peony had been known in China for more than a thousand years, and that it had early been used for medicinal and food purposes. A copy of Miss Thoms's paper is enclosed.

Mr. Louis Burmeister covered the subject of the planting season, and he suggested that the best time to plant peonies is as early as possible after September 1 so that the roots may make a start before frost. Before planting he said that peonies should be placed in water for about twenty-four hours to insure better growth, and that the soil should be thoroughly prepared. And if peonies are planted too deep they may not bloom; if too shallow the crown may be injured during the winter. Peonies should be mulched the first winter.

Mr. Louis R. Potter spoke on the fertilization of the soil for peonies. He said that the soil of the average yard, according to a soil chemist of his acquaintance, had enough plant food in it for twenty years, and that very little fertilization was necessary. Mr. Potter does not believe in using manure because of the possibility of infecting the plants with disease. Of the commercial fertilizers he recommended hardwood ashes and bonemeal for potash, powdered rock phosphate for phosphorous, and potassium nitrate or ammonium sulphate for nitrogen; but the bonemeal should be steamed or heated to rid it of eel worms. Elbow grease, Mr. Potter said, was better than foods, and advised extensive cultivation, as well as the addition of humus to heavy soils, which can be supplied by peat moss or leaf mould.

Mr. Herman J. Koch took as his subject insect pests and diseases. He said very little was known of peony diseases, espe-

(Continued on page 126)



Doubles Yield

and nets $233.50 extra profit

HERE'S the story of what Arcadian Sulphate of Ammonia accomplished for Mr. A. J. Marble, of Omro, Wisconsin:

Mr. Marble divided part of his 75-year old apple orchard into two equal plots. Plot No. 1 received no fertilization. Plot No. 2 received Sulphate of Ammonia at the rate of 200 lbs. per acre.

The results of the fertilizer were noticeable almost at once. "The leaves of the trees seemed deeper green," says Mr. Marble, "and they stayed on the trees longer."

But harvest time gave the complete result. From Plot No. 1 (which received no fertilizer) Mr. Marble gathered 200 bushels of apples per acre. From Plot No. 2 (Sulphate of Ammonia) he harvested 440 bushels—a gain of 240 bushels due to Sulphate of Ammonia.

At current prices Mr. Marble's increased yield represented a net gain of $233.50 per acre—over and above the cost of the fertilizer.

Small wonder that Mr. Marble writes us that he is well satisfied with the results from Arcadian Sulphate of Ammonia.

The Barrett Company
Agricultural Dept.

New York, N. Y., Atlanta, Ga., Medina, O., Montgomery, Ala., Memphis, Tenn., Shreveport, La., San Antonio, Tex., Raleigh, N. C., Washington, D. C., San Francisco, Cal. *In Canada*—Toronto, Ont.

Results PROVE the availability of the nitrogen in

ARCADIAN
Sulphate of Ammonia

N-2-28 KEY

The Barrett Company (address nearest office)

Please send me sample package of Arcadian Sulphate of Ammonia. I am especially interested in.....
(Write names of crops on line above)
and wish you to send me bulletins on these subjects.

Name_____

Address _____

Our Maples Are Worth Saving

By E. L. CHAMBERS

PUBLIC interest in the welfare of our trees has increased tremendously during the past decade. Civic bodies, city administrations and great numbers of individuals are beginning to give serious thought to the matter. Nowhere is this brought out more clearly than in our residential sections where through gross neglect splendid trees have been lost, resulting in each instance in a tremendous decrease in property values.

During the past few years the state entomologist's office has been called upon time and again to diagnose shade tree troubles and make recommendations as to their control. The number of these troubles attacking the maple have been increasing from year to year which check their growth, damage their appearance or even kill them outright. A recent publication of the Nursery Inspection Circular issued by the Pennsylvania Department of Agriculture contains the following very interesting discussion of the more important of these diseases:

Left: Maple wilt. A Norway maple in a street planting Madison. Only a few branches were green when the photo was taken, all the others being dry and dead from this disease.

Right: Norway maple adjacent to the one shown. The branch within the circle wilted suddenly. The trunk of the tree was found to be thoroughly infected with "maple wilt".

Sunscald

The foliage of maple perhaps even more than that of most other trees is subject to the form of injury known as sunscald. This arises from the heat of the sun or even the air on leaves which are temporarily suffering from inadequate water supply. Whether the lack of water is due to root injury, partial girdling of the stem, or merely to very dry soil is immaterial. Lack of sufficient water a few hours on a single hot day will bring about the death of more or less leaf surface and leave the tree unsightly for the rest of the season. In mild cases of sunscald the injury is most prominent between the veins. Additional contributing causes to sunscald are: an excessively developed top bearing too much foliage for the root system to take care of; covering of the earth with pavement which prevents the soaking in of surface water; a recently cut ditch near the tree which destroys the roots and lowers the original water table; and the reflection of heat from buildings and pavements in sheltered places. The weather conditions during leaf development in early summer also affect the susceptibility of the tree to sunscald later in the season. Foliage developed in warm, dry weather will be relatively resistant, while leaves grown in moist, cool conditions will be thinner, more delicate, evaporate more water, and will thus scald readily.

The obvious method for avoiding sunscald is to provide the trees with a sufficient water supply particularly during hot weather. Artificial watering by filling cup-like depressions in the soil, made to hold added water, filling tiles set underground flush with the surface, or use of the hose are recommended in this connection.

Wind Injury to Leaves

When the first leaves of maple come out in spring and are at the stage of a half opened umbrella, their tissues are very soft and delicate and are thus easily torn and cracked by the wind. A strong breeze at this time tears and breaks their surfaces, leaving them ragged and with browned edges and areas.

Frost Injury

A heavy night of frost followed by a bright morning sun may also cause a lot of leaf injury on the side exposed to the first rays of the sun, owing to too rapid thawing which causes death of the tissues.

Gas Injury

Occasionally a tree on a city street dies suddenly in full leaf, the leaves turning brown

and hanging on the tree. In many cases this injury has been traced to a leak in a nearby gas main which has flooded the soil with gas and thus destroyed the root system. Usually the smell of gas can be obtained either above ground or in a hole dug a foot deep and covered with a board for an hour. Another evidence of gas injury is the killing of grass and weeds in an area about the tree.

Root Rot

When sickly maples are examined at the base of the trunk one often finds the bark entirely killed near the point at which the roots begin; sometimes the bark for some distance down on the main roots is also browned and dead. The bark on roots at some distance from the trunk may still be green and fresh as well as that of the trunk above ground. A tree in this condition has been attacked by rot fungi which have partially or completely girdled the base of the trunk. The unfortunate point about such cases is that at the time when the top begins to show suspicious symptoms the girdling is so far advanced that nothing can be done to save the tree. If the root rot attack could be taken in time, it is very likely that removing the already dead bark and exposing the trunk and upper part of the roots to sun and air for several months of summer would check the rot, and enable the tree to make a complete recovery. In such a case the earth should be restored in late fall.

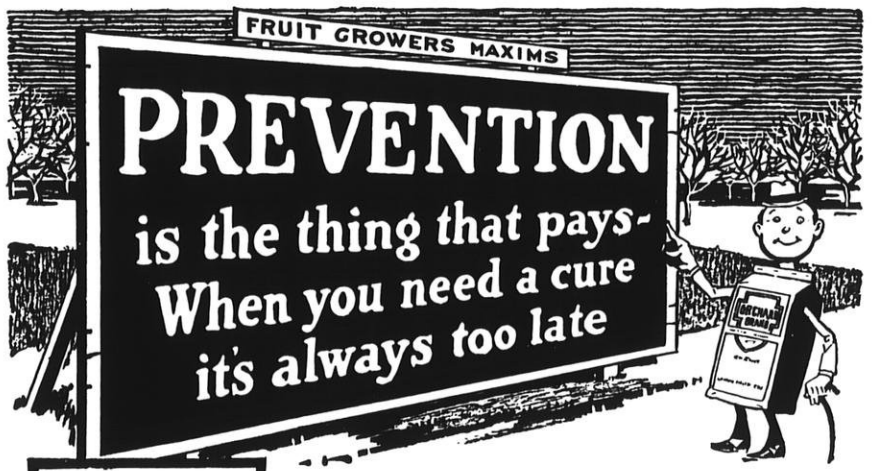
Maple Leaf Spot

This trouble resembles sunscald in a general way; but where sunscald areas are typically between the veins, the leaf spots are more or less circular and have no such relation. Further, one may note on the leaf spots numerous minute dark specks, particularly toward the end of summer; these are the fruiting or spore bearing stage of the leaf spot fungus and are not present on sunscald areas.

Ordinarily the leaf spot disease is not important enough to require any special control measures. Where it is too plentiful the yearly burning of the old leaves will greatly reduce the infection for next season; if more thorough control is needed, spraying would probably be successful, but up to the present it has not been called for.

Staghead

The name given to this trouble was conferred in an attempt to make it descriptive. It refers to a maple tree in which the uppermost branches are dying or dead and appear like a set of antlers sticking up out of the tree. The disease is a progressive one; the first sign is an early coloring or yellowing of the foliage in the top branches after which the sickliness and small size of the



Bordeaux Mixture
Arsenate of Lead
Calcium Arsenate
Arsenite of Zinc
Dritomic Sulphur
Sulphur Dusts

ORCHARD BRAND SPRAY and DUST MATERIALS

Whether You Spray or Dust

YOU are investing material plus labor. You must have results or you will lose not only your money spent but crop profits, too! Play it safe and buy "Orchard Brand" Materials. They are the standard of dependability.

GENERAL CHEMICAL COMPANY
40 Rector Street, New York
St. Louis Los Angeles San Francisco
GCI 58

ORCHARD BRAND
REG. U.S. PAT. OFF.
SPRAY & DUST MATERIALS

leaves become more pronounced each year until the branch dies. Usually the same symptoms progressively affect the next limbs until the tree is entirely killed. The cause is unknown, but it has been suggested that it is due to lack of continuous water supply to the tree top. Not all trees showing staghead symptoms die. Many trees so affected have recovered completely after the sickly limbs had been pruned out, and in certain cases recovery seems to have occurred where no pruning was given. For ordinary shade trees the prompt pruning of staghead limbs seems advisable if for no other reason than that of appearance. If, with this pruning, goes attention to soil fertility and water supply, all that is known to be of value will have been done.

Wilt

Staghead is typically a disease of the upper branches; on the other hand, the wilt disease seems to occur more generally on the lower limbs and often on the smaller ones coming from the main trunk. In staghead the leaves are small and yellowish, and color and fall early; in wilt they merely dry up, become dry and papery and tend to remain on the tree. In a typical wilted limb there may be found narrow, blue-green streaks in the wood.

Wilt is due to a fungus (Verticillium) which clogs up the sap channels and thus causes the drought conditions mentioned. It is said to kill limbs of any size, and even whole trees. On the other hand there is enough evidence of recovery of trees from which limbs affected by wilt had been removed, to justify us in placing some reliance on careful pruning as a method of control. Beyond this, there are no recommendations as yet, as the disease has been studied but little from the standpoint of control.

HOUSE PLANTS

(Continued from page 105)

nor too high a temperature when brought into conditions favoring top growth; and a relatively low temperature and little if any direct sunlight during blossoming.

Bulbs should be firm, comparatively heavy for their size and free from disease. Those of medium size or above usually give more satisfactory results.

Mass planting is usually more effective than a single bulb in a pot. A five or six inch pot will accommodate three or four bulbs of most kinds. Shallow galvanized iron pans about four or five inches deep and eight or nine inches square (with holes punched in the bottom to provide drainage), or shallow wooden boxes make very satisfactory receptacles in which to grow bulbs. If using pots, put in the drainage and partly fill the pot with soil. Set the bulbs on the soil with a quarter to a half inch of space between them. If the proper amount of soil was put in the pot, the top of the bulb will come slightly below the rim of the pot. Fill in the soil loosely to about half way up on the rim, then settle the soil by rapping the pot firmly on the table. Water thoroughly. The potted bulbs are now ready for "storage." Two exceptions might be made to the above method. Some growers prefer to set Dutch hyacinths with about half the bulb above the surface of the soil. Probably the chief advantage is less danger of rot if the bulb should be over-watered. In potting hyacinths and lilies it is a good plan to put a small handful of sand under the bulb.

Water Culture Gives Quick Results

Certain bulbs, particularly the Dutch hyacinth, the paper white narcissus and Chinese sacred lily are frequently grown by water culture. The Paper White is more satisfactory, even though it requires a little longer to grow it than the Chinese sacred lily, which, by the way, is not a lily at all, but a narcissus.

Two methods are used in water culture: the bulb or hyacinth glass, and bowl culture. When the hyacinth glass is used, a single bulb is set in the top of the glass. A small quantity of granulated charcoal should be put in the bottom of the glass and enough water just to touch the base of the bulb. After the roots are started, the water level may be lowered to just below the base of the bulb.

A fairly deep bowl is preferable in bowl culture, although quite shallow ones are frequently used. Put an inch or more of coarse sand, fine gravel or cinders into which has been mixed a small amount of granulated charcoal in the bottom of the bowl. Set the bulbs on this layer, as in pot culture and fill in with sufficient pebbles to hold the fully developed plant in an upright position. Some growers do not set the bulbs away for root development, but this is a hazardous practice and often results in disappointment.

Why start
Pushing up the Daisies
Before you
Have to?
Tuberculosis
Discovered EARLY
and TREATED
Promptly
is usually CURABLE.
The boys in the
Mahogany vests
With Silver Handles
Put off KNOWING
And
Put off TREATING.
Don't join them!
Incidentally,
Christmas Seals
Fight Tuberculosis.
Buy them
and Use them.
—THE WISCONSIN ANTI-TUBERCULOSIS ASS'N.

HIGHEST HORTICULTURAL AWARD FOR 1928

Goes to Colonel William Boyce Thompson as Founder of Institute for Plant Research

THE George Robert White gold medal, considered the highest horticultural honor in America, has been awarded at the meeting of the Massachusetts Horticulural Society in Boston to Colonel William Boyce Thompson of Yonkers, founder of the Boyce Thompson Institute for Plant Research at Yonkers, N. Y. The award has been made yearly since 1909 to the man or woman, commercial firm or institution in the United States or other countries that has done the most in recent years to advance the interest in horticulture in its broadest sense. The medal was designed by John Flanagan.

The planting, founding and endowment of this unique research laboratory at Yonkers, dealing exclusively with the fundamentals of plant life, including elaborately equipped laboratories, 300 acres of experimental grounds and 329 acres for an experimental arboretum, all supported by an endowment of $8,500,000, was deemed to have constituted in the brief four years since its foundation the outstanding recent contribution to the development of horticulture.

The list of nineteen recipients of this medal, headed by Dr. Professor Charles S. Sargent, Director of the Arnold Arboretum, at Jamaica Plain, Mass., includes such well known names as the following: Sir Harry James Veitch, seedsman and nurseryman of London, famous for the introduction of ornamental plants; Dr. Walter Van Fleet, Washington, D. C., and M. Pernet-Ducher of France, both famous for the production of new roses; Professor U. P. Hedrick of the Geneva Experiment Station, noted as a hybridist and writer on fruit growing and Pierre S. DuPont of Wilmington, Delaware, for popularizing horticulture. In 1927, the award went to Liberty Hyde Bailey of Ithaca, New York, for his work as a teacher, editor and author.

INDEX TO ADVERTISERS

	Page
Bahr Nursery	126
Barrett Company	121
Chequamegon Flower Gardens	118
Cumberland Fruit Package Co.	125
Fitchett Dahlia Gardens	98
Friend Mfg. Co.	98
Gelbke, C. A. & Sons	126
General Chemical Co.	123
F. R. Gifford Co.	127
J. F. Hauser	115
Kellogg's Nursery	126
McLaughlin Gormley King Co.	128
North Star Nurseries	125
Rasmussen's Fruit Farm & Nurseries	128
Sisson's Peonies	128
Stonecrest Gardens	126
The Swartz Nurseries	127
W. A. Toole	117
White Elm Nursery	127

INSURE SPRING BEAUTY BY PLANTING BULBS

PRICES of spring flower bulbs are very reasonable according to several ads running in this issue. With good care these bulbs will last for several years so the opportunity of getting good bulbs should not be neglected this fall. For those wishing more information on spring flowering bulbs, we suggest getting the books entitled "Spring Flowering Bulbs" published by the Orange Judd Publishing Company, 15 East 26th Street, New York City, Price $1.25 and "Bulbs That Bloom in the Spring" published by the A. T. DeLaMare Company, 438 to 448 West 37th St., New York City.

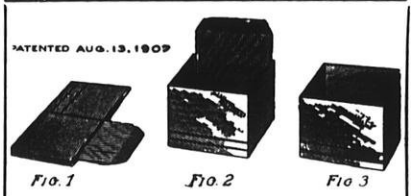


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

THE NORTH STAR NURSERY COMPANY

PARDEEVILLE, WISCONSIN

Growers of

Dependable Nursery Stock for Wisconsin Planters

Write for our illustrated catalogue of hardy stock

Our Motto

Quality - Service - Satisfaction

Landscape Contractors
Builders of Beauty

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

SHRUBS — ORNAMENTALS — ASPARAGUS Plants. West Park Nursery, C. A. Gelbke and Sons, Appleton, Wis.

SEED POTATOES

FOR SALE—Certified Triumph Seed Potatoes very reasonable if taken now, one year from index. Write to Mess & Conradi, c/o, John Conradi Phillips, Wis.

NURSERY STOCK

FOR SALE: NURSERY STOCK. FRUIT and ornamental trees. Shrubs and perennials. Send for list. Bahr Nursery, Manitowoc, Wis.

MILWAUKEE SOCIETY DISCUSSES THE PEONY

(Continued from page 121)

cially the cause of the shrinking of the roots. Bothrytis, the darkening of the stalk above the soil, should be treated with dehydrated lime or a light solution of potassium permanganate. Hollow crown root happens mostly to older plants or to plants that have exhausted the fertility of the soil or to plants that do not get enough sunshine. The thing to do is to look for the cause. The dry rot should be cleaned out and the plant reset in full sunshine. Mr. Koch suggested that prevention is better than treatment, and he stated that ants do not harm peonies. He also said that leaf rust will not affect the plants although it can be controlled by Bordeaux mixture. The first consideration, however, is to buy roots from good reliable nurserymen, for if roots are not clean, fresh, plump, and heavy the chances are that they are more or less sick and are naturally sensitive to diseases.

Mr. W. A. Sisson of Rosendale, grower of the finer varieties of peonies, was our outside speaker. He not only gave us an instructive talk on what determines the price of a peony and what is a natural division, but he delighted us in his own inimitable way until the lights were turned out at ten o'clock.

Dependable Nursery Stock for Wisconsin Growers

Hardy Fruits, Flowers and Ornamentals

Sold Direct from Nursery to Planter

Prices Right

74th Year

Kellogg's Nursery

Box 77 **Janesville, Wis.**

6 Peony Roots for $3.00

12 Fine Peony Roots, $5.00

100 Choice Gladiolus Bulbs $2.00
10 each of 10 kinds labeled,
FOB by Express. October and November delivery

Send For Catalog

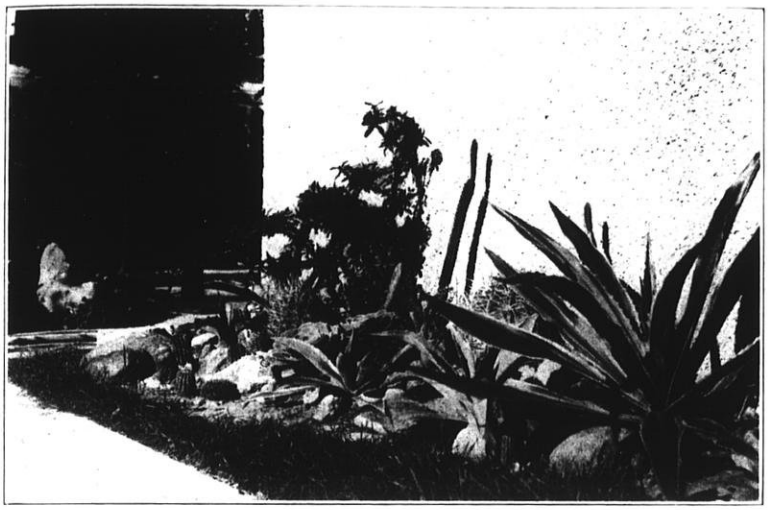
Stonecrest Gardens
Eau Claire, Wis.

MILWAUKEE ROSARIANS ARE ACTIVE

Mr. I. J. Schulte of Milwaukee writes, "I am no longer secretary of the Milwaukee County Rosarians. Mr. H. Gutknecht, 313–18th Avenue, Milwaukee, has taken over the work and the activities of the little band of rose bugs will be reported by him in the future. We now have twenty-seven members.

You will be interested in learning that a municipal rose garden for Milwaukee has become an actuality. A space of about seventy-five feet square has been set aside and prepared in Sherman Park, and the roses will be planted in the spring. The garden will be under the supervision of Mr. Otto Spidel, city forester, and we hope to enlarge it from time to time.

We are planning to have one of the country's outstanding authorities on roses at one of our spring meetings. Dr. J. Horace McFarland of Harrisburg, Pennsylvania, editor of the American Rose Annual, has written that he may be able to talk to us, but if he cannot come either Mr. Robert Pyle, secretary of the American Rose Society, or Mr. G. A. Stevens will come. These men are all authors of books on roses and rose growing. If we succeed in getting one of these rosarians to give us a talk we shall probably have a joint meeting with the Milwaukee County Horticul-



Cacti garden of Mrs. Urban Ziegler, Milwaukee.

tural Society and devote the evening to the subject of roses.

I am enclosing two pictures that I took of one of the last roses I picked from my garden this fall. This is Mme. Jules Bouche, undoubtedly one of the finest white roses grown, beautiful in the bud as well as when fully open.

I am also enclosing two snapshots which I took of the cacti garden of Mr. Urban Ziegler, one of my neighbors. This little patch contains thirty-five different kinds of cacti, most of which Mr. Ziegler has gathered in his travels through the west. He calls this his state garden because the stones in it, all labeled, come from twenty-four different states, as well as from Panama and Alaska, all of which were collected by Mr. Ziegler himself. Of course, the cacti, of which there are about fifty plants, must all be potted in the fall and taken into the house. But they require very little care, and Mr. Ziegler keeps most of them in the basement during the winter.

Mr. Ziegler also has a rock garden built in the terrace of the lawn on both sides of the steps leading to the rear entrance of his home. He is crowded like the rest of us city gardeners and makes use of every bit of available space."

The latest reports on apple production give the total production for the United States as follows:

1921-1925, 5 year average 169,732,000; 1926, 246,524,000; 1927, 123,455,000; 1928, 178,070,000.

This indicates about 45% more apples this year than last, about one-third less than in 1926.

Macon, Ga.—(AP)—The Georgia Peach Growers' exchange has pronounced a sentence of death on 1,000,000 diseased peach trees. The state and federal departments of agriculture will be asked to aid in financing destruction of the trees.

—Milwaukee Journal.

ORCHARD
Pruning Tools

GARDEN
Seeds and Tools

FARM SUPPLIES
Lime Spreaders, Fertilizers, Etc.

Write for Prices

F. R. Gifford Co.
2201 University Ave. Madison, Wis.

White Elm Nursery Co.
Hartland, Wisconsin
General Line of
Ornamentals and Fruits

Member
Kenosha Florists and Nurserymen's Association
Assoc. Member
Illinois Nurserymen's Association

The Swartz Nurseries
GROWERS OF
Shade, Ornamental & Evergreen Trees
Shrubs, Vines and Roses
Park, Cemetery, and Golf Ground Planting
Landscape Architects
KENOSHA, WISCONSIN
Phone 2F4

Dependable—

That is a quality we constantly strive for; we want every customer to feel confident that his orders will be cared for in a dependable manner, and that the plants he receives will be of highest quality and absolutely true to name and description.

We grow a complete line of fruit and shade trees, ornamental shrubs, perennials, climbing vines, berry plants, etc. consisting of the best varieties.

—Catalog on Request—

Visitors Always Welcome

RASMUSSEN'S

FRUIT FARM AND NURSERIES

Oshkosh **Wisconsin**

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

How Much Do You Lose Each Year Because of Insects?

THE most successful growers have devoted a great deal of thought and experimentation to this ever-present menace. Many of them have turned to **Ever Green** as the most scientific and efficient method of insect control available today. More and more growers, both large and small, are finding that every dollar invested in **Ever Green** pays them a profit in larger, and finer crops.

You, too, will find it profitable to use **Ever Green.**

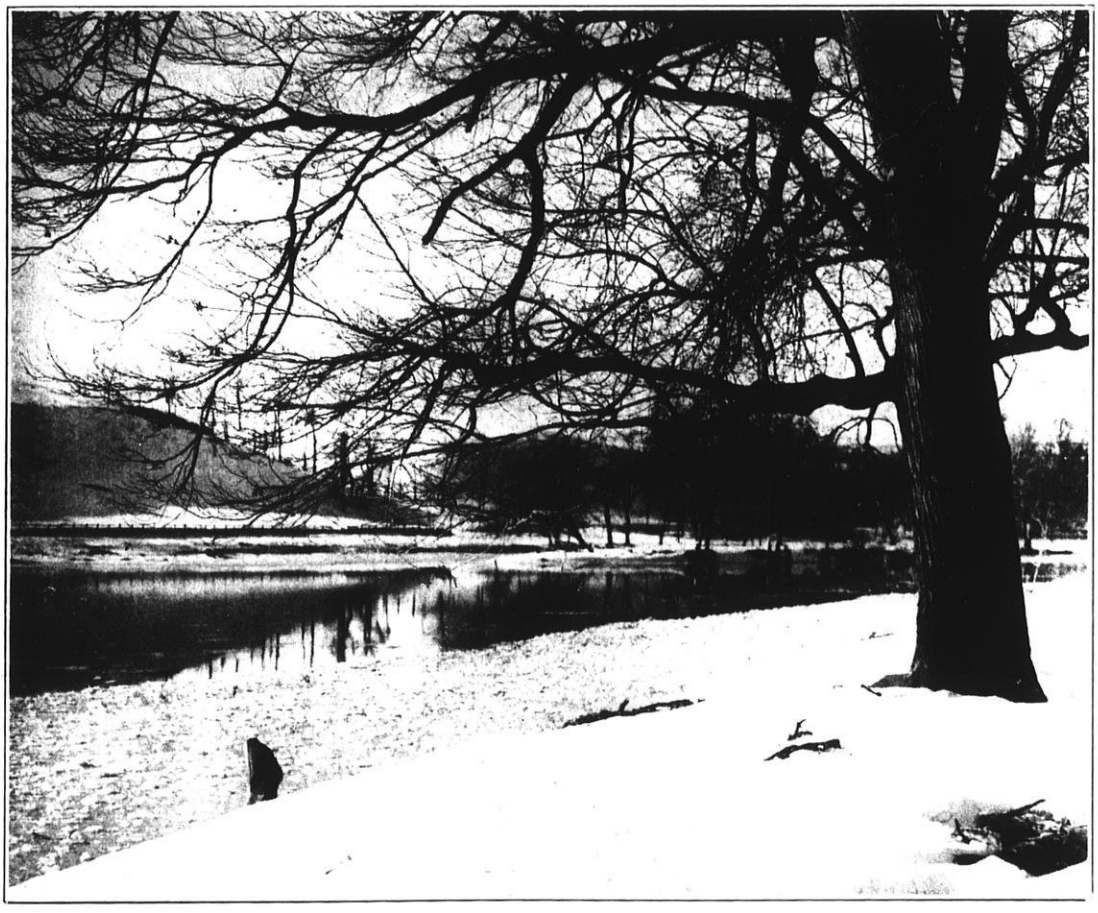
Spray with

Try It On our money-back guarantee. Sold by seed houses and florist supply houses. If your dealer isn't supplied, send $1.00 for 6 oz. bottle, circular and spray chart.

McLaughlin Gormley King Co. 1722 S. E. Fifth St., Minneapolis, Minn.

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE



Vol. XIX JANUARY, 1929 No. 5

FREE PLANT PREMIUMS

Offered To

Members of the Horticultural Society

By

Wisconsin Nurserymen and Growers

Who May Receive Them

Individual annual members: Plants sent free, postpaid to:

1. All new, annual members, sending in $1.00 membership fee before April 1st, 1929.

2. All old annual members sending $1.00 for renewal before April 1st, and sending names of three prospective members. Membership will be extended from date of expiration.

Special Offer

Annual members sending in $1.00 for one **new member** may retain 50c or one-half of their own membership fee, or we will extend their membership six months. Both old and new members may select free plant premiums.

3. Any member sending in $1.00 for a new member may select one plant premium for each new member secured without renewing his own membership. New member may also select a premium.

Local Societies Or Clubs Affiliated With The Horticultural Society

All members of affiliated organizations may select plant premiums but we must charge them the actual cost of packing and postage which is 15 cents.

The Society has agreed to pay this amount to each grower who sends out the plants. Due to the low membership fees charged organizations we cannot pay this as we do with the $1.00 memberships.

Send membership fees and choice of premium to Wisconsin State Horticultural Society, Washington Bldg., Madison, Wisconsin, at once. First come, first served.

Growers and Nurserymen Donating Plants and Nursery Stock

Note: The following list is not complete. More detail will be given next month where the information is not complete or varieties not fully listed. Donations from other Wisconsin growers welcome.

In ordering, give 1st, 2nd and 3rd choice—in case supply is exhausted.

V. E. BRUBAKER, CHEQUAMEGON FLOWER GARDENS
Washburn, Wis.
500 Lupine plants
Premium 5 strong plants

H. C. CHRISTENSEN
Oshkosh, Wis.
100 blooming size Regale lily bulbs
Premium 2 bulbs
500 planting size Regale lily bulbs
Premium 10 bulbs

COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.
500 German Iris, named varieties
Premium 2 rhizomes
500 Gladiolus bulbs, named varieties
Premium 4 bulbs

W. A. DANA, STONECREST GARDENS
Eau Claire, Wis.
1,000 blooming size gladiolus bulbs
Premium 6 bulbs
Varieties: Le Marshal Foch, light pink; E. J. Shaylor, rose pink; A. B. Kunderd, cream pink ruffled; Carmen Sylvia, best white; Jewell, salmon and yellow; Salmon Beauty, salmon; Crimson Glow, bright red; 1910 Rose, light rose pink; Los Angeles, shrimp pink; Mr. Mark, blue; Pink Wonder, large light pink; Dorothy Wheeler, choice pink.

J. T. FITCHETT, FITCHETT DAHLIA GARDENS
Janesville, Wis.
100 Dahlias
Premium 1 root

JOHN F. HAUSER, SUPERIOR VIEW FARM
Bayfield, Wis.
Delphiniums and Shasta Daisies, strong one year old plants
Premium 10 plants

McKAY NURSERY COMPANY
Madison, Wis.
200 two year, No. 1 Concord Grapes
Premium 2 plants

THE NORTH STAR NURSERY CO.
Pardeeville, Wis.
50 Hydrangea Paniculata G 12-18″
50 Coralberry or Indian Currant 18-24″
Premium 1 shrub, either variety

RASMUSSEN'S FRUIT FARM AND NURSERY
Oshkosh, Wis.
20 packages, 1 doz. each, Oshkosh Strawberry plants
Premium 1 package
20 **French** Delphiniums
Premium one large plant ready to bloom

W. A. SISSON OF SISSON'S PEONIES
Rosendale, Wis.
100 peony roots, named varieties
Premium 1 root
100 iris, named varieties
Premium 1 rhizomes

SWARTZ NURSERY
Kenosha, Wis.
100 Excelsior climbing roses
Premium 1 plant
100 Spiraea Vanhoutte
Premium 1 plant

W. A. TOOLE, GARRY-NEE-DULE
Baraboo, Wis.
150 Delphiniums, blue hybrids
100 Delphiniums, Belladonna
50 Phlox Siebold 50 Phlox Rheinlander
50 Phlox Miss Lingard
100 Canterbury Bells
50 Aquilegias, long spurred hybrids
100 Shasta Daisies 50 Coreopsis lanceolata
50 Gaillardia grandiflora
50 Oriental Poppy
50 Platycodon 50 Pyrethrum roseum
Premium choice of 3 plants

Send for price list in case you wish additional plants or bulbs

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS

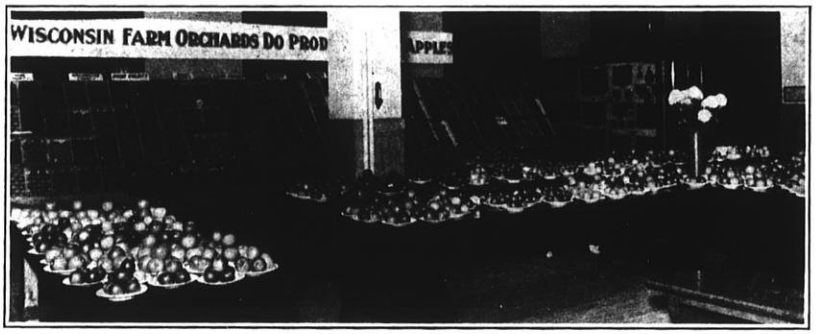
President
C. J. Telfer, Green Bay

Vice-President
M. B. Goff, Sturgeon Bay

Secretary
H. J. Rahmlow, Madison

Our 59th Annual Convention

A Wonderful Fruit Exhibit and Good Program Features Our First Visit to Milwaukee



A section of the fruit show with county exhibits in the background. Individual tray exhibits not shown here. Over 300 trays of fruit were on display.

"VERY SUCCESSFUL" is the verdict pronounced upon the 59th annual convention of this Society at the Milwaukee Public Museum and Library December 5–6–7. At least it was the opinion of practically everyone whom we heard express an opinion.

A great deal of credit goes to the Milwaukee County Horticultural Society and its various special committees appointed by President Huron Smith to cooperate in putting on the convention. Credit also goes to the authorities of the Milwaukee Museum and Library who gave splendid cooperation and help in putting on our exhibit and giving us free access to lecture rooms and exhibit space.

The crowd was good. 180 attended the afternoon session to hear Jens Jensen of Chicago on Thursday, December 6. Some of the special sections were not as well attended as they might have been, but this was a new idea and when our members realize the type of program they can get at these meetings, no doubt more will attend.

The garden club section was very well attended as was the fruit growers section most of the time.

The Apple Show

Over three hundred trays of apples were shown in the Museum Hall. In quality and quantity it was probably the best show ever put on by the Society. This was the opinion

County Agent Milton Button with the Milwaukee Journal silver cup won by the Dane County fruit exhibit.

of a number of our older exhibitors and members.

One of the important features was the County Exhibit. Nine counties put up an exhibit of ten trays each representing five different farmers. This class promises to be the best feature of the convention. It brings in County Agents and fruit growers from different sections of the State.

Professor J. G. Moore did his usual good work in judging individual exhibits. Professor Alderman of Minnesota was asked to judge the County exhibits because the large number of entries, and the limited time made it almost impossible for Professor Moore to finish. Professor Alderman did very good work.

The tray of McIntosh apples exhibited by the Kickapoo Development Company represented by Mr. McKenna, Gays Mills, was an unusual sample in quality. It well deserved the large silver cup donated by the Boston Store.

Some wonderful Delicious apples were also shown and the Northwestern Greenings were as good as we have seen.

Mr. A. K. Bassett of Baraboo was probably one of the heaviest prize winners.

Much credit is due to N. A. Rasmussen of Oshkosh and C. L. Kuehner of Madison for their work in putting up the fruit show, and to Mr. Smith and Mr. Fuller of the Museum Botany Dept. for general supervision and help in putting on the convention.

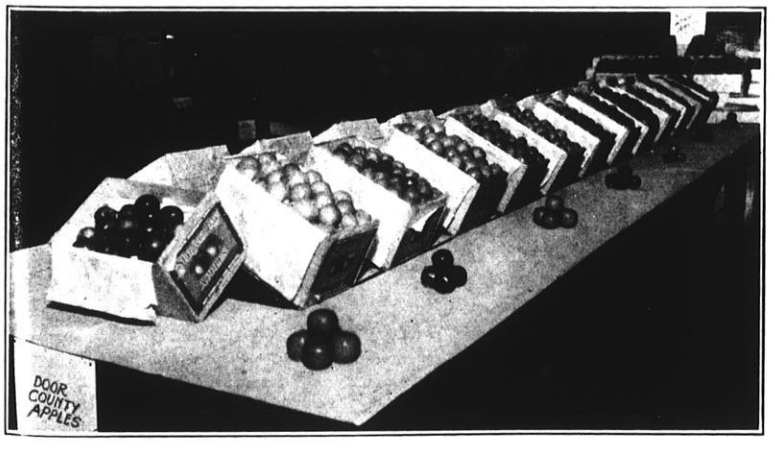
The flower show was not large but was of good quality. Holton & Hunkel of Milwaukee were probably the largest exhibitors. The exhibits were judged by James Livingstone who did his usual careful work.

The vegetable show was not as large as it might have been, especially in the greenhouse vegetable class. It was judged by H. C. Christensen of Oshkosh.

New Officers Elected

Several new faces appear in the Board of Managers and Executive Committee. At the annual meeting Friday forenoon December the 7th, C. J. Telfer, formerly Vice-president, was elected to the office of president and Moulton B. Goff of Sturgeon Bay was elected Vice-president. H. J. Rahmlow was re-elected Secretary by the Executive Committee.

The terms of four members of the Executive Committee expired and M. S. Kellogg of Janesville and James Livingstone of Milwaukee were re-elected. The two new members on the Board are Mr. L. E. Birmingham of Sturgeon Bay and Mrs. C. E. Strong of West Allis.



Door County exhibited some fine apples in boxes. Over 175 carloads of apples were shipped from the County this year.

Invitations were received by the Society to hold its next annual convention at Sheboygan, submitted by Arnold Meyer of Waldo, and from the Oshkosh Horticultural Society to hold it in Oshkosh, presented by N. A. Rasmussen. The Milwaukee Chamber of Commerce also sent an invitation to again hold the convention at Milwaukee.

The final decision of the matter was left to the Executive Committee and will be taken up at the summer meeting.

The banquet was fine. 115 attended. Huron Smith proved a very capable toastmaster. The principal speaker of the evening was Jens Jensen of Chicago who spoke on the topic of more parks and more land around our city schools planted to trees. Music was rendered throughout the dinner by a string trio and some very pleasing numbers were given by Mr. George Gratz on the piano and Miss LaVuaghn Smith on the violin.

A reading by Miss Jeanette Dobrinsky was appreciated by all and Francis Melonig gave a demonstration on "Japanese Flower Arrangement." Miss Esther Herrick was unable to assist her, being in attendance at the annual 4 H Club Congress in Chicago.

At the close of the program the silver trophies won by the exhibitors were presented and attendance prizes were drawn. Some fine prizes had been donated and were highly appreciated by the guests winning them.

The officers of the Society who attended the session and Executive Committee meetings, of which there was one during almost every lunch and dinner hour were, J. E. Leverich, Sparta, former president, C. J. Telfer, Green Bay, president-elect, H. J. Rahmlow, Madison, secretary, M. B. Goff, Sturgeon Bay, M. S. Kellogg, Janesville, James Livingstone, Milwaukee, V. E. Brubaker, Washburn, H. W. Ullsperger, Sturgeon Bay, J. F. Swartz, Kenosha, H. C. Christ-

ensen, Oshkosh, W. E. Spreiter, LaCrosse and A. K. Bassett, Baraboo.

Papers to be Printed in Magazine

Some splendid papers were read at the various programs. Most of these were handed to the Secretary and will be printed in this magazine. Due to the fact that we have decided to discontinue publishing papers in the annual report, members are urged to file their copies of WISCONSIN HORTICULTURE for future reference, and have them bound at the end of the year.

John Hauser of Bayfield, one of Wisconsin's largest growers of perennials, again won first on his splendid exhibit of strawflowers.

CONVENTION PRIZE WINNERS

THE Dane County Booth, Mr. Milton Button, County Agent in charge, with the following exhibitors, L. M. Nelson, R. Hammersly, McLain Bros., Ed. Stoeber, and J. L. Williams, won first place in the County fruit exhibit class at the annual convention of the Society at Milwaukee December 5–6–7. They received the large silver cup donated by the Milwaukee Journal.

Second place went to Sauk County with A. K. Bassett of Baraboo in charge and the following exhibitors, A. K. Bassett, L. B. Irish, Ed. Martin, J. S. Palmer, W. A. Toole.

Third place was won by Milwaukee County with County Agent Ray Pallett in charge with the following exhibitors, Irwin Jante, John Koehler, Wm. Basse, John Stephan, Niederman Farm.

Fourth place went to Grant County with Mr. Ralph Irwin of Lancaster in charge.

Fifth place went to Rock County with R. T. Glassco of Janesville in charge.

Other placings were Washington County, Door County, Waukesha County and Jefferson County.

The following is an itemized list of the winners:

SINGLE TRAY EXHIBIT

McIntosh:
1st, Kickapoo Development Company, Gays Mills, Boston Store Silver Trophy
2nd, Ed. Stoeber, Madison
3rd, N. A. Rasmussen, Oshkosh
4th, Arno Meyer, Waldo

Wealthy:
1st, N. A. Rasmussen, Kiwanis Club Silver Trophy
2nd, A. K. Bassett, Baraboo
3rd, J. A. Hass, Ellison Bay
4th, Swartz Bros., Waukesha

Delicious:
1st, Ed. Stoeber
2nd, A. K. Bassett
3rd, Ralph Irwin, Lancaster
4th, W. H. Milward, Madison

Northwestern Greening:
1st, A. K. Bassett
2nd, Ralph Irwin
3rd, Ed. Stoeber
4th, L. B. Irish, Baraboo

Fameuse (Snow):
1st, A. K. Bassett
2nd, N. A. Rasmussen
3rd, J. A. Hass
4th, Wm. Leonard, Fort Atkinson

Windsor:
1st, A. K. Bassett
2nd, Ralph Irwin
3rd, L. E. Birmingham, Sturgeon Bay
4th, N. A. Rasmussen

Wolf River:
1st, A. K. Bassett
2nd, N. A. Rasmussen
3rd, Ed. Stoeber
4th, Jos. Morawetz, West Bend

Salome:
1st, Fred Kurtz, Port Washington
2nd, Ralph Irwin
3rd, Ed. Stoeber
4th, Ed. Gassner, Rockfield

Westfield:
1st, A. K. Bassett
2nd, Robert Ward, Fort Atkinson
3rd, N. A. Rasmussen

Tolman Sweet:
1st, A. K. Bassett
2nd, Harriet Morley, Caledonia
3rd, Ed. Stoeber
4th, Jos. Morawetz

McMahon:
1st, John Koehler, No. Milwaukee
2nd, L. B. Irish
3rd, L. E. Birmingham
4th, N. A. Rasmussen

Three Trays each of Any Three Varieties:
1st, A. K. Bassett
2nd, Ralph Irwin
3rd, N. A. Rasmussen

PLATE EXHIBIT

Pewaukee:
1st, Wm. Leonard, Ft. Atkinson
2nd, Robert Ward, Ft. Atkinson
3rd, A. K. Bassett

Baldwin:
1st, Arno Meyer
2nd, L. B. Irish
3rd, J. A. Hass

Plum Cider:
1st, Wm. H. Basse, Milwaukee
3rd, John E. Hauser, LaCrosse

Gano:
1st, L. E. Birmingham
2nd, Ed. Stoeber
3rd, A. K. Bassett

St. Lawrence:
1st, N. A. Rasmussen
2nd, Wm. H. Basse

Dudley:
3rd, L. E. Birmingham

Scotts Winter:
1st, A. K. Bassett
2nd, Arno Meyer

Grimes Golden:
1st, A. K. Bassett
2nd, Wm. Leonard, Ft. Atkinson
3rd, Kickapoo Development Co.

20 Ounce:
1st, Arno Meyer

Golden Delicious:
1st, A. K. Bassett
3rd, L. B. Irish

Waganer:
1st, Kickapoo Development Company
2nd, Arno Meyer
3rd, Ed. Gassner

Jonathan:
1st, A. K. Bassett
2nd, Kickapoo Development Co.
3rd, L. B. Irish

McMahon:
1st, Harriet Morley
2nd, John Koehler
3rd, L. E. Birmingham

Wealthy:
1st, A. K. Bassett
2nd, Arno Meyer
3rd, Wm. Basse

McIntosh:
1st, Kickapoo Development Co.
2nd, N. A. Rasmussen
3rd, A. K. Bassett

(Continued on page 150)

Our Changing Horticulture

Future Opportunities for Fruit Production in the Middle West

W. H. ALDERMAN
Chief, Division of Horticulture
University of Minnesota

In this article Prof. Alderman discusses the possibilities for future production of apples, grapes and other fruits. Wisconsin and Minnesota have an unusually good future because of their location.

THE fruit growing industry of America has passed through three rather distinct periods. The first of these might be characterized as the cider, wine and brandy period and occupies roughly the first 150 to 200 years of horticultural development in this country. During this time of course some fruit was grown for dessert and table purposes, but the bulk of the production coming from the larger plantings was used in the manufacture of beverages. Statistics of early apple production of New England frequently mentions the yield or crop in terms of hogsheads of cider manufactured. The great peach orchards in the Alleghany region were largely utilized in the production of peach brandy and the grapes of the eastern United States found their way into wine.

Since the juice was the principal product of the orchards, the quality of the fruit cut little figure and these early orchards were for a large part made up of seedlings. With the beginning of the nineteenth century more and more interest became manifest by individual horticulturists in the production of better quality fruits and for a period of fifty years or more we passed through a stage of development that might well be characterized as the amateur period. This period was characterized by the development of many of the great horticulturists of the last century, the Princes, the Downings, Manning, Wilder, and many others.

The origination of new, high quality fruits became a fad and growers prided themselves upon the number of distinct varieties they were able to grow in their own orchards. In many cases some of these varieties were jealously guarded and dissemination was prevented.

An outgrowth of this amateur interest in horticulture was found in the publication of many books dealing with the care and management of fruit trees. It was a period which witnessed distinct advances in the science and art of horticulture.

Following this period came an era of commercial development of the fresh fruit industry. The close of the Civil War found the country making great strides in the development of transportation, enabling orchardists to place their fruits upon more distant markets. As transportation facilities increased and with the advent of artificial refrigeration, refrigerator cars and cold storages, the possibilities of commercial development became increasingly apparent and the plantings increased by leaps and bounds.

The depression during the closing years of the past century acted as a temporary check, but by 1910 there was a complete recovery and a veritable planting craze struck the entire country. The possibilities of cooperative marketing, the wonderful profits of the irrigated orchards of the Pacific Coast, the prosperous condition of the orchardists of the East stimulated an interest that attracted capital. The large company orchards came in and the industry took on all the aspects of big business.

We are familiar with the failures which followed over-enthusiastic promotion, successes of the conservative grower, fluctuations in prices and the more or less unsettled condition of the whole industry. Taking the industry as a whole, however, with its ups and downs there has been a steady increase in production until now it has reached almost astounding proportions. The expansion of the industry and the relative importance of the various fruits are indicated in the production figures of the accompanying table.

FRUIT PRODUCTION IN THE UNITED STATES

(Figures indicate 1000 bushel units)

	1925	1926	1927
Apples	172,389	246,524	123,455
Grapes (harvested)	103,204	121,170	123,235
Grapes (not harvested)	6,900	750	7,100
Peaches (harvested)	46,562	18,403	42,755
Peaches (not harvested)		1,462	2,708
Pears	20,720	25,249	18,072
Oranges	33,723	39,304	32,770
Grape fruit	9,265	8,191	6,510
Lemons	7,136	7,712	6,400
Cranberries	1,138	1,487	990
Strawberries	7,143	8,686	10,696
Cherries	1,000	1,656	1,092
Plums and prunes	3,700	4,428	3,936
Dried prunes (in terms of fresh fruit)	18,500	19,526	21,320
Pineapples		22	13
Apricots	6,150	7,216	7,544
Totals	437,530	561,786	408,596

Our Billion Dollar Fruit Crop

The fruit crop of the United States during the past few years has exceeded the $1,000,000,000 mark, when computated on the

basis of the farm value of the crop. Few of us can comprehend the magnitude of a billion dollars. Some comparisons with other agricultural enterprises will assist us in gaining a more accurate impression of the extent of the fruit industry. *It exceeds, for instance, the total value of the wheat crop.* When we realize that the American people pay more for their fruit than they do for their daily bread, we gain a better idea of what we are talking about.

One of the most common products of America is the potato, consumed in every home and making up a considerable portion of our daily diet, but the *value of the annual fruit crop more than doubles that of the annual potato crop of the United States.*

We in America are rather noted for our meat eating, but the *value of all the beef cattle on all the farms and ranges in this country does not equal the value of the fruits produced in any single year, nor do the swine which consume the major portion of a normal corn crop of America equal in value of the fruits produced in this country.* The growing and marketing of the fruit crop of the United States has become one of our greatest industrial enterprises.

Suppose now we examine with a little more detail the status of several of the more important fruit crops with a view of determining their probable future growth and development.

The Apple Situation

Since the apple is widely grown and generally looked upon as our most important fruit, let us study it first. In the past ten years we have witnessed a number of disappointing seasons for the apple growers. Large production and low prices have reduced profits and in many cases have forced the sale of fruit below the cost of production. Does this mean that we have reached a period of over-production? In some regions and in some years, this is undoubtedly the case.

The rapid expansion of the industry on the Pacific Coast during the past twenty-year period has probably done more to bring about this situation than any other single factor. It would appear, however, that the production from this important region has now reached its peak. Many marginal orchards have already been removed because of unprontable returns. The production of the district, which for a while increased steadily year by year, has now settled down to a production affected only by the normal seasonal fluctuations. There is no extensive new planting in this region and at present no expansion is contemplated. The western crop has become more or less stabilized and its future influence on the market can probably be estimated on the basis of its present influence.

The Great Lakes region, including New York, Michigan and Ohio, has been more conservative in its program of expansion, but has also shown a tendency toward a moderate increase in planting throughout the period. Although this region is characterized by the longevity of its trees, it is true that many of the orchards are already old and are on the decline. It is quite likely that, taking the district as a whole, the new plantings which are coming in will a little more than offset the old plantings which are going out. If there are any changes to be expected in production during the next ten years, it will probably be that of a slight increase rather than a decrease.

The same conditions prevail throughout New England. The Appalachian district planted heavily from 1905 to 1915 and the young orchards of this area are still increasing in their crop production. A part of this gain will be offset by old orchards which are going out and by the failure of some of the orchards which have been unable to withstand the financial stress of the past five years. Most of the other areas in the apple regions of the United States show on the whole slight increases in production, although there will be some districts in which there is likely to be a definite falling off of the crop.

Pear Crop Heavy

The pear industry is not quite as widespread as the apple and is a little easier to study. The Eastern and Great Lakes States have in the main maintained a fair equilibrium between the old orchards which are going out and the young orchards which have been planted.

The spectacular development has been on the West Coast. In the expansion of pear planting, California easily leads the rest of the states. She has long been recognized as a great Bartlett producing state and has developed an enormous market not only for fresh fruits, but for the canned and the evaporated products as well. But California today seems to be producing all the Bartlett pears that the market will absorb, with some seasons showing an actual over-production. On the top of this situation we must be concerned with the fact that about a third of her total planting is still in the non-bearing stage or just entering the stage of production, and that another considerable portion has not yet reached the peak of its production.

An increase in crops in California of from 50 to 100 per cent need not be an entirely unexpected development within the next five years. Heavy production and the shipping of large quantities of fresh fruit during the early season has affected the Bartlett market for Oregon and Washington, so that there would seem to be an undoubted overproduction of early pears facing the Pacific Coast growers the next few years. The later pears,

such as Anjou, have not been so heavily planted and prospects for future markets seem somewhat better. However, an over supply of early season Bartletts will undoubtedly affect the later markets adversely to some extent.

Taking the country at large, one could hardly recommend any expansion of the present pear planting within the next few years.

Over-production of Grapes

A most interesting and disheartening situation has developed in the grape industry. This industry, more than any other, was directly affected by the passage of the 18th Amendment. Prior to that time, table grape market of the eastern United States was reasonably stable and satisfactory. Table grapes, wine and raisin industry of the Pacific Coast was also in a fairly stable and reasonably prosperous condition.

The immediate effect of the prohibition amendment was the destruction of many of the western vineyards. This was followed by an unprecedented demand for both wine and table grapes sold as fresh fruit. The East partially abandoned the use of their high quality four-quart baskets and began to sell grapes in larger containers in direct competition with the western juice grape. California vineyards were replanted and an almost frenzied expansion of the industry followed. This expansion has reached such a point that during the past four years anywhere from a million to seven million bushels of grapes have remained unharvested in California vineyards and those which have gone upon the market have sold so low that they barely pay the cost of production.

The eastern table grape market has been affected by the competition of the western grape so that this fruit has retailed during the past year at phenomenally low prices. There is now an unquestioned overproduction of grapes in the United States and except in places where the local market will warrant a planting, there should certainly be no expansion in this industry. On the other hand, there is almost sure to be a reduction in acreage until supply and demand reach an equilibrium or the price will make possible profitable production.

Co-op Marketing Helps Citrus Industry

The production of oranges and other citrus fruits during the past five years has probably been the most profitable of all the major branches of fruit growing. This has been largely due to the efforts of the splendid marketing organization of the West Coast. During this period, however, there has been a steady and widespread expansion in young plantings of both oranges and grape fruit.

Development of the grape fruit industry in the Imperial Valley, southern Arizona, the Rio Grande Valley of Texas, the already large development of Florida make the student of the situation seriously question the possibilities of overproduction with this fruit.

In a similar way the orange industry is being expanded both in southern California and along the Gulf Coast, the latter district going in rather heavily for the hardy Satsuma variety. It will certainly take expert handling of the markets to move at a profit the citrus crop of five years hence.

Time will not permit a similar analysis of the peach, prune, and of the small fruit industry of the United States except to state that the stone fruits especially have pretty well kept pace with the strong planting and production of other fruits.

Competition Between Varieties

Within recent years there has been injected into the fruit market situation of the United States a new factor. Formerly the various fruits stood out more or less by themselves and were profitable or unprofitable largely as production and public demand for a particular fruit created a favorable or an unfavorable price condition for that fruit.

Aggressive marketing campaigns for various types of fruit have in more recent years thrown the different kinds of products into more or less direct competition with each other. Oranges and grape fruit have seriously invaded the apple market. When we serve a grape fruit on our breakfast table we do not eat a fresh apple or consume a dish of apple sauce. When the housewife is confronted with glowing ads depicting the value, the attractiveness of the banana as a food, and when she can buy this at a price that compares favorably with that of home grown fruit, she is going to buy bananas in greater quantities than before and correspondingly less of some other fruit.

Not only do we have competition between various types of fruits, but we are now encountering a competition between fruits and vegetables. Succulent winter vegetables from the southern states and from Mexico have invaded all of our markets. More salads made from fresh vegetables are consumed during the winter than ever before in our history. And here again, the possible outlet for fresh fruit is jeopardized by the invasion of the new products.

The Future

What of the future? Will the situation improve or will it get worse? How long will it take to stabilize the industry and place it upon a definitely prosperous basis? I wish that I could answer these questions, but I seriously doubt if any man can. At the present time there seems to

(Continued on page 157)

Making a Rock Garden

MRS. MARTHA MALISCH

This paper was read to the Garden Club Section during the Convention. Mrs. Malish, who was elected President of the Wisconsin Garden Club Federation, tells her personal experiences.

MANY books on rock gardens have been published giving explicit instructions on suitable locations, methods of building, soil, shade, moisture etc., but from all this published material we must try and glean the best methods of procedure suited to our own home conditions as we find them.

These authors, of course, give us valuable information from their own experiences with rock gardens, yet, it is impossible to follow all of their suggestions. One authority writes: "The rock garden should not be situated near highly cultivated ground, neither should walls or buildings come into view. It is best approached from the region of woodland or shrubbery."

How many of us however, can get very far away from a building or a fence? Only a few, possibly, have a woodland from which to approach the rock garden, yet we can all follow the suggestion of using shrubbery.

One of the most charming rock gardens that I have seen was made by a woman in Bay View. She has the usual sized city lot, the back part being higher than the front. The rock garden is located where the land slopes abruptly towards the house. Water was piped to make a tiny cascade, rippling over lime rocks into a pool at the foot of the rock garden.

One thing to avoid in making a rock garden is to set the stones perpendicularly into the earth. The best method is to follow Nature's arrangement of rocks. If you will study the rocks on some exposed hillside, you will get the right idea.

When I started my own rock garden I had much enthusiasm but little knowledge. I had big boulders hauled in on a stone boat. These big rocks are not easily moved about, so they were placed near the bottom and smaller stones put in an upright position higher up in the garden.

A Rock Garden Cut Courtesy W. A. Toole

This arrangement had to answer the purpose the first season, but during the meantime I learned that this would never give the rock garden that natural appearance which all good rock gardens should have, so the second spring I had the larger stones near the bottom of the garden sunk deeper into the earth, and I replaced the smaller rocks with sizes that could be brought into place without the use of block and tackle. These also were placed in position to give the appearance of a natural rocky hill-side.

One of the important points to remember in rock work is to place the rocks so that they form pockets to hold the soil. Every rock must be set so that it slopes slightly back towards the hill. You can readily see that this arrangement catches the moisture and sends it to the roots of your plants.

The best soil to use is the ordinary garden loam with a little grit and peat mixed in.

Now a few words about the plants. There are the very low growing ones that form carpets of bloom. Among these are the following: Veronica repens, having tiny pale blue flowers and neat looking foliage; Sedum acre, with its bright yellow flowers; Phlox subulata, forming a compact evergreen mass with pale lavender, white or rosy flowers. Saponaria ocymoides is one of the most showy rock plants, with bright pink flowers. Cerastium tomentosum, bearing pure white flowers has the habit of creeping over the rocks, covering them entirely. Spergula pilifera aurea is very low growing, almost mosslike, with tiny white flowers.

Then there are the slightly taller varieties like Alyssum saxatile, Arabis Albida, Achillea Ageratum and Aethionema coriddifolium, having dainty pink flowers. I planted this near Sinum pirenne, the pale blue making a lovely color combination with the pink. It needs some covering during the winter. Calamintha Alpina, having

purple flowers. Gypsophila repens, with white flowers. Polemonium caeruleum: This has blue flowers. Santolina tomentosa, having gay foliage. Stachys lanata, which also has grey foliage. Both of these require some protection during the winter. Centauria rigidifolia rosea: This has beautifully cut foliage and rosy lavender flowers.

I could keep on naming many more which I have found hardy, but time will not permit.

Don't overcrowd the rock garden or mix large and small plants. Give the tiny plants enough room. The weaker ones should be planted in pockets by themselves, where the strong will not crowd them out. Rank growing plants like Cerastium, certain Sedums and creeping Renunculas should be kept in colonies by themselves. The Renunculas are some of the worst offenders. They will not confine themselves to their own pockets, but throw out suckers over the rocks, trying to find a foothold somewhere. Several years ago a friend gave me a few plants which I planted in my border. The next spring I dug out enough to fill a wheelbarrow and still a few kept on appearing here and there.

The rock garden is at its best in spring. What a mass of beauty greets our eye! In my opinion, of all the different phases of gardening, nothing can be more picturesque than a rock garden, with perhaps a tiny pool at the foot of it. We gardeners can draw a living picture in our home grounds which we can enjoy and admire every day.

Racine County is the leading County in Wisconsin in cabbage and onion production according to the Racine Journal. Last year the County grew over 3,500 acres of cabbage and over 600 acres of onions. It produced over 40% of the onion acreage of the state.

Simple Control for Crowngall and Root-Knot Found

CROWNGALL, root-knot, and similar malformations, which annually cause the loss of millions of young trees being propagated in nurseries can now be controlled.

This epochal and long awaited announcement was made December 31 before the American Phytopathological Society, meeting in New York. by A. J. Riker, of the College of Agriculture of the University of Wisconsin. In view of the fact that this has long been considered one of the most baffling of plant disease problems, the announcement was considered of unusual significance.

Riker reported upon a simple and inexpensive method devised by a group of three pathologists, consisting of G. W. Keitt, W. M. Banfield, and himself. This control method has come after five years of intensive research, as a part of the Wisconsin program in a crowngall project supported cooperatively by the Crop Protection Institute, the Iowa State College of Agriculture, and the University of Wisconsin, assisted by the United States Department of Agriculture.

According to Riker, crowngall, root-knot, and other malformations occur most commonly at the unions of stocks and scions of apple trees grown from piece-root grafts. This union, under commercial nursery methods is usually wrapped with waxed string, but several other wrappers have also been tried. The control measures attempted at the Agricultural Experiment Station of the University of Wisconsin have been of three kinds: 1. The use of antiseptics on the soil, on the wrappers employed, or on the finished graft, with the aim of killing the microorganisms that are believed largely responsible for many of the malformations. 2. The modification of the grafting methods, and, 3. Modifications in wrapping materials and methods. Riker and his associates made their discovery in the last group.

He reported that the use of adhesive plaster, or nurserymen's tape, on apple grafts, during four years, under widely varying conditions, covering a geographic range which included Iowa, Kansas, Minnesota, Missouri, Nebraska, Oklahoma, and Wisconsin has resulted in an average saving of 30 trees out of every 100. Counts made on several hundred young trees wrapped with the new type of tape show an average of 92 smooth, healthy trees out of each 100 treated. The untreated trees average only 62 out of each 100 that are free from malformations. In every experiment in each of the four years the plaster has increased the percentage of trees with smooth unions.

"The cost of applying the plaster is very small and in many nurseries is no greater than for the wrapper now used", declared Riker. "On the average one good tree saved out of each 100 treated more than pays for the increased cost. The tape, one-half inch wide, is applied in a spiral wrap over every part of the graft union, care being taken to overlap the edge of the plaster slightly, and to make a water-tight covering over every part of the cut surface. Not more than two thicknesses of plaster encircle the graft at any one point. After the scion and stock have united the plaster, being under the ground, rots, and no tendency for girdling occurs."

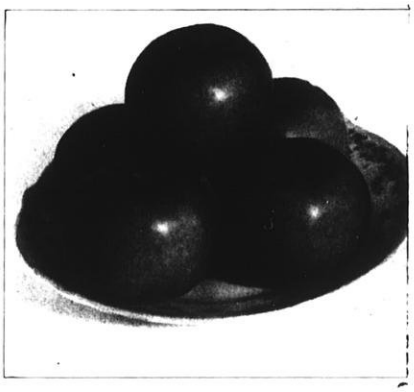
Wisconsin's farm income last year reached $431,000,000.

History of the McIntosh Apple

JOHN McINTOSH, whose name shall be a household word because of his discovery of the McIntosh apple, was a United Empire Loyalist. From his comfortable home in the Mohawk Valley he came to Canada, finally settling on lot 9, concession 5, in the township of Matilda, Dundas County, Ontario. The locality was later known as "McIntosh's Corners" and still later by its present name, "Dundela." Here, as he was industriously clearing the land adjacent to his forest home, he came across a clump of apple trees, about 20 in number, quietly growing in company with the huge maples, oak and elms on every side. With zealous care he transplanted these in a space in the clearing. That was in 1796. Several of the trees thrived for a time, but finally only one remained. This one, however, was a hardy tree, bore an abundance of luscious fruit and was the parent tree of the great McIntosh Red Apple, a species which to-day is so extensively known and grown throughout the world.

The McIntosh home was a centre of considerable interest for the entire locality. It was staunchly Methodist, and hearty was the welcome extended to the pioneer Methodist preachers who, on foot or on horseback chanced to pass that way. Very often they tarried and when the neighbors had gathered, they held old-time service in the old-time way. But the host of the McIntosh home had a further interest in the welfare of the community. Before the settlers could turn their attention to the erection of the proverbial log school house, John McIntosh, during one winter gave a portion of his home to be used as a school room.

But, while he was the discoverer of the original tree, a large measure of the benefit thus accruing to the world to-day is due



A Plate of McIntosh

to his son, the late Allan McIntosh, the propagator and preserver, and who appreciating so greatly the fruit, desired others to enjoy it and thus carried on the extension of the good work by grafting and budding from the parent tree.

Going back but a step, one incident in the life of the original tree has an unpleasant coloring. In 1893 fire consumed the historic McIntosh home. Close at hand about 15 feet distant, was the old tree. Many decades previous, fire to it had been very commonplace as the excellent timber which to-day would be about as valuable as downtown real estate in Toronto, was transformed into ashes to enlarge the clearing and make room for additional crop. But now fate was severe and the pioneer tree was badly scorched. Clinging tenaciously to life, one side continued to bear fruit, until 1908, when in mid-summer, the leaves dropped and the apples fell. It had finished its work.

One may yet look upon the stalwart trunk and branches left standing as a memento of the past. And when we think of the vitality possessed by the original tree, remembering that many years ago it passed the century mark, we gaze in amazement at the shadow of its former self and meditate on the changeful scenes it had witnessed.

Considering the excellence of the McIntosh Red Apple the fact of it being a real Canadian, the vitality and long life of the parent tree, the heroism, patriotism, perseverance and wisdom displayed by the men who discovered and preserved it, nothing could be more appropriate than the erection of the monument unveiled in June, 1912, on the McIntosh homestead, now the property of Mr. H. A. McIntosh. While thus rendering to posterity a service national in character, the fact that the cost of the monument was secured by popular subscription furnishes an example of local patriotism most worthy of emulation.

—CANADIAN HORTICULTURIST.

THE EXPERIMENT STATION REPORT

"What's New In Farm Science", the 45th annual report of the Wisconsin Agricultural Experiment Station, will be sent this year only to parties who apply for them, according to Professor A. W. Hopkins.

The report of the Experiment Station now embraces so many lines of work that the extended report will be sent only to those who make application. While the edition lasts, copies are sent free to residents of Wisconsin and to residents of other states who send twenty cents a copy with their applications.

Where are our apple trees? Eight Counties of Wisconsin have over 80,000 apple trees. Door County leads with 172,249 trees, Sheboygan County second with 95,555, Bayfield County third with 88,214, Dane County fourth with 86,091, Waukesha County fifth with 82,983, Crawford County sixth with 82,515, Manitowoc County seventh with 81,781 and Marathon County eighth with 80,850. The total number of apple trees in Wisconsin according to the 1925 census was 2,906,782.

Dutch Bulbs

L. A. BURMEISTER, JR.

TULIPS may be purchased in a great variety of both soft and brilliant colors. They are fine for formal bedding, for borders or for planting in clumps in an informal way about the foundation of the house or in the shrub border. Tulips bloom in April and May.

Tulips

Plant the bulbs so that base is three or four inches below the surface of the soil and space them so they will stand six or eight inches apart. Do not try to make a few tulip bulbs cover too much space.

If you wish to purchase only a certain number, better make the bed so that you can space them the suggested distance apart rather than spacing them a foot or more apart in a larger bed.

Mixed colors of tulips are all right for informal plantings, but for a formal bed choose all one color or at least not more than two or three colors.

Hyacinths

Hyacinths like tulips adapt themselves to both formal and informal plantings. They are not quite so showy and brilliant as tulips, but the colors are soft and rich. You have all seen beautiful beds of fragrant hyacinths in pure white, pink, rich rosy red and blue. Hyacinths should be planted a little deeper than tulips, about six inches to the base of the bulbs and about eight inches apart.

This paper on Dutch Bulbs was read at the December meeting of the Milwaukee Horticultural Society.

Crocus and Snowdrops

The little crocus and snowdrop are the first flowers that bloom in the spring and as such they should be very welcome. You will see them appearing on the warm sunny lawns before the snow has disappeared from the shady corners. Crocuses grow only five to six inches high, so plant them where they will be seen.

One good way to plant them in the lawn is to take a sharp spade and make two cuts at an angle so that a corner of the sod can be lifted up. Tuck two or three crocus bulbs, right side up, under the sod and tramp it down again over them.

Winter Protection for Bulbs

After the ground freezes, (not before) spread a few inches of leaves, straw or strawy rotted manure over the planting and remove it early in spring. There is this advantage from mulching during the winter aside from the protection it gives in that you can delay the blooming period in the spring if you wish to. Sometimes there will be a few warm sunny days very early and growth starts. Then a change in the weather may bring about hard freezing, enough to injure the bulbs that have started growth. The mulch simply delays growth until such danger is past. Remember this always in mulching bulbs and other plants for winter protection. It is not done to prevent the ground from freezing but rather to prevent alternate thawing and freezing during the winter. Put the mulch on after the ground is frozen.

Bulbs for Indoors

For indoor planting the soil for potting should be rather light. Take some good black top soil, wood earth or leaf mold and mix it with sand. Take a handful of the soil when moist and squeeze it into a ball, just as soon as you release your fingers the ball should crumble apart. If the soil will do that it is all right for potting.

The size of the pot depends on how many bulbs you wish to put in it. A four inch pot will hold one Hyacinth easily. A six or eight inch pot will hold three or four hyacinths, five or six tulips or a dozen crocus.

Put some cinder or pieces of broken crock in the bottom of the pot for air and water drainage. Then throw in some fine soil, set your bulbs on that and

(Continued on page 158)

Crocus

Success With Apples and Cherries

A. J. ROGERS, JR.
Beulah, Mich.

I AM going to introduce my subject in rather an unusual way. A couple of weeks ago, I had the privilege of going thru the Ford Motor Works at River Rouge. My first impressions were of awe and wonder; awe because of the enormity of the plant and its operations; wonder, that such an octopus could ever be made to pay. Gradually, in going thru, I was aware of a wonderfully efficient system, capable of producing a tremendous output.

First I saw great quantities of raw materials coming in by water and rail. Then I saw the last word in the production of cheap power-powdered coal being blown into the furnace, producing steam to drive great 65,000 H.P. turbine generators. Here is where the finest of steels are made, all to be incorporated finally in the ultimate automobile. Apparently all the materials which go to make a car are manufactured here in the plant. Gradually they are shaped into final form. A fast moving endless belt carries completed engines to freight cars which rapidly make up train loads destined for other Ford assembly plants. There are sixteen final assembly lines in all parts of the world, of which only one is located at the River Rouge works. As I watched the output from this one final line, and realized that it is only one-sixteenth of the entire production of the plant, I could not help but be impressed by the vastness and efficiency which made it all possible.

For many months millions of dollars were poured into the operation incident to the making of the new car. Production was slow at first, with the resulting cost per car far greater than the price obtained. Later with the same plant and not many more men, the system, planned correctly from the start became mature; faster and faster came the cars, until at last the "yield" of cars was great enough to reduce the cost of manufacture per car to a point where a profit is made.

There is a tremendous market for automobiles, but competition is intensely keen.

Economical production is essential for profit.

As with automobiles, just so there is a tremendous market for fruit, and competition is also intensely keen. Here too, neither the initial cost of the plant nor the cost of operation matters as long as the final yield produced cheapens the unit cost. Periods of overproduction are bound to come with subsequent elimination of inefficiently yielding orchards.

A vital factor in the success of an apple or cherry orchard is in the initial plan, in other words getting a good start before a tree has been planted. To get this good start it is extremely important that the initial investment of the orchard up to the age of bearing be kept as low as possible, *not by stinting necessary expense*, but by some form of management which will reduce this cost by means of early bearing crops or possibly inter-cropping. This lower initial investment is a big factor in cutting the future cost of production. Further, it is extremely important that the future orchard bear regularly. The loss of a crop does not cut the cost of maintenance for that year. The burden of this combined loss must be shouldered by later crops, resulting in increased cost of production. This management finally must include in its plan conditions which will

bring about heavy yields of good quality.

Let us consider then, factors within our control effecting early bearing and regular annual crops of high yields of good quality apples and cherries. Naturally the site is of first consideration. Its choice must take into account the nearness to market and ease of transportation, freedom from frost, freedom from exposure, and a suitable soil. Henry Ford practically built a new plant because he failed in the first place to locate it adjacent to water transportation.

With an annual maintenance expense of $160 per acre (which I found to be my cost) which must be incurred whether there is a crop or not, the cost of losing a crop thru frost is a serious matter. It adds greatly to the cost per pound of raising fruit. It emphasizes the relatively great value of frost free sites as compared with those where injurious frosts are frequent. Doubling the frost hazard may easily turn a net profit into a net loss.

The loss or injury of fruit by wind is becoming increasingly important, as the demand for better quality continues to grow. Formerly there was a large tolerance for wind whipped cherries and limb rubbed apples. That is all changed now, only the best is wanted. The answer to wind injury is natural or artificial wind breaks which can and must be figured in the value of a good site.

TABLE I.—PLANTING DISTANCE

Feet Plant Distance	Original number trees to acre	Yield lbs. per tree total first 16 years	Total yield lbs. per acre 16 years	Total yield lbs. per acre 17 years	Total yield lbs. per acre 18 years	Total yield lbs. per acre 19 years
C ....16½'x16½'	160	521	93,393	114,698	135 698	154,228
L ....16½'x20 '	134	556	82,537	92 530	92.760	105,050
D ....23' x23 '	80	901	72,182	81,104	82,391	92,433
C less D lbs.....			20,911	33 594	53 307	61,795
Value on tree at 5.15 cts. per lb.			$1,076.92	$1,730.09	$2,745.37	$3,182.44

TABLE II.—PLANTING DISTANCE

Age	Lbs. per acre C–16½'	Lbs. per acre D–23'	C	D
10	10,944	5,901	1.5 ct.	2.7 ct.
11	8,413	5,990	1.9 "	2.7 "
12	3,000	5.745	5 5 "	2.8 "
13	17,860	10,224	.9 "	1.5 "
14	12,000	13,173	1.3 "	1.2 "
15	8,920	15,292	1.8 "	1. "
16	21,305	12 503	.8 "	1.3 "
17	21,200	7,226	.8 "	2 2 "
18	21,630	1,282	.8 "	13. "
19	18,530	10,042	.9 "	1.6 "
20	15,170		1 1 "	
21	1,335		12 4 "	
22	20,730		.8 "	
Total	181,037	87,378	Av. 2.35 "	3.00 "
Average per year			14,695	8.737
Production cost			1.13	1.88
Grand net received			4	3¼
Grand net			$587.80	$283.95

TABLE III.—PRUNING

Age	Blk. C—lbs. per acre	Blk. D—lbs. per acre	Blk. K—lbs. per acre
4			648
5		38	2,540
6	75	333	6 060
7	700	1,509	8,723
8	3,263	1.422	7,920
9	6,913	352	891
10	10,944	5,901	13,800
Total	21,895	9,555	40,582
Gross cost 10 years	$1,060	$1,060	$1,060
Value @ 5 ct. tree	1,094	477.75	2.029
Balance	+$34	—$582.25	+$969
To date fruit cost in cash per lb. figured from gross cost orchard	4.84	11.10	2.61
Total — First 9 years	10,951	3,654	26,782
Cost per pound of fruit to bring orchard to bearing age	8.22 cts.	24.6 cts.	3.36 cts.

Right Variety Essential

Another factor of equal importance to the site is the choice of proper varieties. Henry Ford found that his old Model T engine could no longer stand competition. It was scrapped and an entire new engine developed, at the cost of many millions of dollars. Out of many varieties of cherries, Montmorency stands head and shoulders above the rest. It outyielded, on my farm, English Morello and the sweet varieties 2 to 1, and Duke, Early Richmond and Louis Phillipe 4 to 1.

Still another factor in considering a plan for this successfully high yielding orchard is the distance that the trees are to be planted. The data presented in the accompanying tables, 1 and 2, show striking differences in yield between various blocks (C, D and L) of Montmorencies. The yield per acre is seen to be greatly in favor of the closer planting. The wider spaced trees are larger and better looking. Individually they are better. Collectively they are less profitable. It may be said that the differences in production cost per acre associated with the different planting distances has been negligible.

After the tree has been planted the right sort of pruning, spraying, fertilizing and cultivating confronts the grower. The figures in table 3 on pruning young cherry trees, show striking differences between the several blocks of Montmorencies in earliness of bearing and in the size of the early crops. The trees in block K were planted where Bartlett pears had been removed, their distance being 20 ft. Though the figures for the other blocks are for the fruit actually harvested, those for Block K were necessarily calculated at

(Continued on page 156)

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S.H.S., Madison, Wis.
Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

TEN HEALTH RULES

Ten commandments of health suggested by Miss Marie Leonard, Dean of women at the University of Illinois, are:

Eat less; chew more.

Ride less; walk more.

Clothe less; bathe more.

Worry less; work more.

Idle less; play more.

Talk less; think more.

Go less; sleep more.

Waste less; give more.

Scold less; laugh more.

Preach less; practice more.

WISHING YOU A HAPPY NEW YEAR

WE TAKE this opportunity in wishing all of our members a very happy and prosperous new year.

At the dawn of every new year we all hope that the coming season will be better than the one just passed. To some it will bring joy and prosperity, to others it may bring sorrow. Regardless of what there may be in store for us, our happiness will depend a great deal upon our mental attitude.

We believe that those who are interested in horticultural pursuits, who love the out-of-doors, and whose work brings them in contact with nature, have a greater opportunity for happiness than those who are denied these things.

Pleasant surroundings, good friends, an interest in one's work are necessary for true happiness.

1928 may be considered a good year for horticulturists. Crops have been good and prices fair. May 1929 give you even a greater abundance of the things that make for prosperity.

OUR NEW OFFICERS

ON THIS page we are showing pictures of our new president Mr. C. J. Telfer of Green Bay, and Vice-president Mr. M. B. Goff of Sturgeon Bay.

These pictures were taken during the summer "on the firing line" showing that our officers are practical horticulturists. Mr. Telfer, manager of the Larson Canning Company's large orchard, was caught during spraying operations. Mr. Goff is shown in his extensive cherry orchard during the blooming period at a time when thousands of visitors passed through Door County to see this beautiful sight.

Both men are very much interested in the success of the Horticultural Society and, constituting the Board of Managers, are doing everything in their power to promote its welfare.

President C. J. Telfer at work.

Two new faces appear on the Executive Committee, Mrs. C. E. Strong of West Allis and Mr. Lester Birmingham of Sturgeon Bay. Mrs. Strong has been an enthusiastic worker for the welfare of the Society and represents a large portion of our membership, the amateurs—garden clubs and horticultural societies.

Mr. Birmingham is a successful fruit grower in Door County and will fill the place on the Executive Committee left vacant by Mr. Goff.

Both Mr. M. S. Kellogg of Janesville and Mr. James Livingstone of Milwaukee were re-elected. They have served the society well for many years.

MANY INTERESTING PAPERS TO BE PUBLISHED IN WISCONSIN HORTICULTURE

WE ARE unable to print very many of the splendid papers given us by the convention speakers at our convention in Milwaukee this month. These will be published just as fast as space will permit and as they seem most timely.

Some of the important articles coming during the next few months are the following: Better Programs for Local Society meetings, by Archie S. Hill; Growing Raspberries, by W. H. Alderman; "The Horticultural Society", President's Address, J. E. Leverich; The Control of Mosaic Diseases in the Greenhouse by S. P. Doolittle; Fertilizers for Fruit by C. J. Chapman; Standard Containers for Fruits and Vegetables by L. C. Carry; Hardy Perennials by W. A. Toole; Apple Scab by R. E. Vaughan; Why Breed New Varieties by W. H. Alderman; Cherry Leaf Spot by R. E. Vaughan; Causes of Failure and Success in Rose Growing by August Peter; Leaf Mold in Greenhouse Tomatoes by J. C. Walker; Apple Grades and Apple Grading by M. A. Russell; Rock Plants from Seed by Mrs. A. Jaeger, and Success with Apples and Cherries by A. J. Rogers.

CAN YOU BEAT THIS RASPBERRY YIELD?

MR. R. S. MACKINTOSH, Secretary of the Minnesota Horticultural Society, reports that K. M. Larwick, Kenyon, Minnesota, harvested 2,016 pints of raspberries from a one-third acre patch set out the previous year. He sold these for 12½¢ per pint receiving $252.00, or at the rate of $757.50 per acre.

Secretary Mackintosh asks if there is any one else in Minnesota who can beat this record on plants set the previous year?

Let's hear from our Wisconsin growers. Can you beat it?

Vice President M. B. Goff in his cherry orchard.

POISON MAY BE USED IN THE ORCHARD

THIS month we have an article by the State Entomologist, E. L. Chambers, stating the law in regard to the use of poison bait in orchards to kill mice. Several of our game wardens had the idea that it was unlawful to use poison of any kind in the field and had so advised some of our fruit growers.

The trouble was they only read part of the law. Paragraph C of the Statutes as quoted by Mr. Chambers definitely states that poison baits, dynamite, and poison gas may be used with reasonable care for the destruction of injurious insects, rodents and sparrows.

BIRD KILLING NOT POPULAR

IN OUR December issue we had an article by Mrs. A. C. Hollister of Mukwonago entitled "Don't Kill Birds", in which she defends our feathered friends and tells what good they do.

This letter was written by Mrs. Hollister in answer to an article published in the October issue written by Mr. Carl Schwarz of Richfield, Wisconsin, saying that the birds had practically ruined his cherry crop for several years. He wanted to know if the Conservation Commission cannot be given the right to issue permits to kill birds taking the fruit.

The December issue had no sooner reached our members than Mrs. Hollister sends us a letter written her by Swartz Brothers of Waukesha asking her to notify the public to which Schwarz she was referring as they had been asked by parties in their neighborhood if they were the ones Mrs. Hollister meant.

Swartz Brothers of Waukesha are perfectly innocent. We should have mentioned in the December issue the name of Carl Schwarz of Richfield. However, it goes to show that the killing of birds isn't very popular in the public mind. It also shows that it isn't easy for those connected with the State Government to carry out the wishes of individuals when they have a grievance of this kind.

FREE PLANT PREMIUM OFFER

Be sure to read the free plant premium offers on the first two pages this month.

You can take advantage of this offer by extending your membership now. Most important, however, is to call it to the attention of your friends interested in fruit, flowers or vegetables.

Won't you please send us several names so we can mail them the magazine and tell them of the offer?

About the Home and Garden

MRS. C. E. STRONG, Editor 80th and George St., West Allis

THE GARDEN OF MY DREAMS

There's a dear old fashioned garden
That I never shall forget.
There's no other garden like it in the land.
I can see it in my dreams,
There the white narcissus gleams,
And the daffodils in golden glory stand.

There the lilac's purple plumes,
Sends the perfume through the rooms,
As I sit and listen to the humming of the bees.
Oh, the soft south wind is blowing,
And you almost think it's snowing,
As the petals drift from all the apple trees.

Morning glory, honeysuckle, screen the doorway where I stand;
Zinnias, balsams, calliopsis—all that sturdy happy band;
Mignonette, the portulaca, four o'clocks and corn flowers, too;
Cockscomb, columbine, and asters,
Covered with the morning dew.

Heaven's blue is in the larkspur;
Marigolds are prim and straight;
Hollyhocks in gorgeous beauty standing by the garden gate;
Ragged ladies, stocks, and pansies;
Phlox drummondi, poppies red;
Candytuft and English daisies, all in one old-fashioned bed.

Oh, it's there I'd like to wander, in that garden over yonder
Where the June pinks grew in masses soft and sweet,
With the heliotrope and roses,
All the dear old-fashioned posies,
In this garden with its paths so prim and neat.

This old garden of my childhood, in my dreams I see it yet.
It's a sweet and pleasant vision,
One I never shall forget.
For there's charm in this old garden, with its dear old-fashioned posies,
Where the June pinks grew in masses, near the heliotrope and roses.

—Composed and read by Mrs. Strong at the meeting of the Milwaukee Horticultural Society.

IMPROVING OUR FLOWER SHOWS

"JUDGES at our flower shows should standardize their work through becoming conversant with the standards adopted for the various classes. Not until this is done will our exhibitions be fully successful," says Prof. Henry J. Moore of Guelph, Ontario in the 22nd annual report of the Ontario Horticultural Society.

He suggests that in close competition all judges use a score card of which the following is an example:

SCORE CARD FOR SWEET PEAS

Length of stem	25
Color	20
Size	25
Substance	15
Number of flowers on a stem	15
	100

He suggests also that professionals should not be allowed to compete with amateurs but they should not be debarred from competing. There should be classes for professionals as well as amateurs.

Vague Specifications

Vague specifications are criticized, an example being—"Vase Bouquet." "What is the standard aimed at," asks Mr. Moore. "No one can tell! Under such a specification we find exhibited hand bouquets, tall bouquets, low-spreading ones, etc. Why not in the bouquet class have such as the following: (a) Best bouquet for the living-room; (b) Best bouquet for dining table?"

Another vague specification is "Best Collection of Perennials. This is perhaps the most indefinite. Nothing is said about the number of varieties or how to be exhibited, thus we find a lack of uniformity throughout the exhibits of the entire class."

"Collection of Cut Flowers," is another. The specification should read—"Best collection of cut flowers, the varieties artistically arranged in separate containers with stems of a usual length."

"Basket of Cut Flowers" is another. This specification is also indefinite. To it should be added, quality and harmony of arrangement to count.

Table Decorations

"Table Decorations" may mean a plant, a bouquet in vase, bowl or basket or any form of centre piece. Why not this specification — "Decorated dining-table with cloth, flowers, containers and floral tracery alone to be used."

He further suggests that within the limits of every class exhibits should be exhibited in uniform containers. All may then be shown to equal advantage. The exhibit in the high containers usually has the advantage of appearance over that in the low one, although the latter may be just as good. Appearance in this case is false, but often influences the judge.

National Peony and Iris Growers Meet at Chicago

W. A. SISSON

THE Commercial Peony and Iris Growers Association held their third annual meeting, at the Hotel La Salle, Chicago, Dec. 10–11.

Mr. C. F. Wassenberg, President, called the meeting to order Monday morning with a representative number on hand.

Secretary H. G. Seyler's report showed an increase in membership, the number now being around 200. Treasurer W. L. Gumm gave his report which showed a nice balance in the treasury with all bills paid.

Mr. A. M. Brand of Faribault, Minn., appeared as the first speaker and he had for his subject "Things we owe our Customers". He urged the using of better shipping facilities, reminding us that many of our members began packing and shipping without previous knowledge such as Nurserymen have. We should use new retainers of some sort and wrap as carefully and as neatly as any merchant in shipping out fine goods and be very careful that our roots were proper divisions, free from dirt, rot and disease.

In the discussion that followed the prevailing sentiment favored dampened moss wrapped about the roots and the whole nested in excelsior, in the shipment of retail roots. For wholesale shipments, the use of barrels or large boxes with the roots packed in shavings or saw dust was urged. This talk from Mr. Brand was most comprehensive, and with a later talk on "Problems of the Introducer", he was easily the most interesting of all the speakers. He had no prepared papers but spoke concisely from long experience. It may be stated that the Brands are the pioneers, or one of the pioneer growers and introducers of the American peony. The Father, Oliver F. Brand, came from Fond du Lac, Wis., but in the Spring of 1867 he moved to Faribault, Minn., where he established a successful Nursery, the first in that state.

Edward Auten Jr., of Princeville, Ills., next spoke on "Stretching the Advertising Dollar". In the discussion which followed a motion was made to have the Secretary get in touch with magazines and ask them to unite the peony and iris advertisements.

Officers nominated for the ensuing year were as follows—Paul L. Battey, Glencoe, Ills., President; H. G. Seyler, Weiser Park, Pa., Secretary, and W. L. Gumm, Remington, Ind., as Treasurer; C. F. Wassenberg of Van Wert, O., and A. N. Brand as new Directors. All of these were duly elected.

Prof. F. F. Weinard, of the University of Illinois, gave a talk on Fertilizers and Diseases and also on the Trial Gardens located at Urbana. This garden contains about 800 different varieties of Japs and singles, donated by members of our society.

Edmund Carpenter of the advertising department of Marquette University, gave a paper on Advertising our Products.

Tuesday's session had to do largely with publicity affairs. Frank Presby Advertising Agency represented by Mr. Edwards gave the first talk. Mr. Wolcott of the Manz Engraving Co. gave an illustrated talk on Producing Color Plates. Miss Nellie Brown of the U. S. Dept. of Agriculture was not present but sent in her paper on Nematode Control and Progress. Others present discussed the subject at length.

Mr. Robert Wayman of Bayside, Long Island, N. Y., gave us the finest talk on Irises I have ever heard. Again here is a man who has had a life of experience and every known iris, he has in his garden for study. It is easy for most of us to talk about things we actually know about and its interesting to listen to, I believe. Those of us who write papers and articles have plenty of time to draw on what others have written, which in many cases makes our listeners drowsy and indifferent.

Kenneth Bangs gave a talk on Landscape Architect Attitude after which I led in a discussion on kinds of roots to send out to our customers.

The Association voted certain amounts in money to further the cause of work on color plates and to work in conjunction with the National American Peony Society. Also to do certain advertising in trades papers and get out a standard instruction leaflet covering the growing of Iris and Peonies.

Mr. Harry Little exhibited the new Peony Manual gotten out by the Peony Society. Price to members five dollars. To others six dollars. Write to W. F. Christman, Robbinsdale, Minn.

Those wishing to join our Commercial Peony and Iris Association, send five dollars to W. L. Gumm, Remington, Ind. Those who wish to join the American Peony Society, send three dollars to Mr. Christman. Those who wish to join the American Iris Society, send three dollars to J. B. Wallace, Jr., 129 Church St., New Haven, Conn.

Mr. and Mrs. Toole from Baraboo and Mr. Lawson and myself from Rosendale were the only Wisconsin people present. This seems quite strange considering the vast number of growers we have and the easy access to the place of this great meeting.

We understand that Mr. W. F. Christman of Robbinsdale, Minn., is about to move to Glencoe, Ills., and join forces with Mr. Battey in the Northbrook Gardens.

Garden Club Activities

MINUTES OF THE MEETING OF THE WISCONSIN GARDEN CLUB FEDERATION

MEETING called to order by Mr. Huron Smith, president of the Milwaukee County Horticultural Society in the absence of the temporary president and vice-president, in the Milwaukee Public Museum, December 6, 1928 at 9 A. M.

Meeting opened with discussion as to the advisability of organization of a State Federation.

It was moved and seconded that organization of a Federation be deferred one year. The motion was lost.

It was moved and seconded that the permanent Federation of Garden Clubs be organized and the Federation be affiliated with the Wisconsin State Horticultural Society. Motion carried.

Chairman Mr. Smith appointed a nominating committee for the nominating of officers consisting of Mr. Bodenstein of Madison, Mrs. Alvin Hurtgen of Spring Valley and Mr. J. F. Swartz of Kenosha. Said committee was asked to submit nominations for the permanent offices of president, vice-president, and secretary-treasurer, at the afternoon session. Officers were to be voted on at that time and results announced at the banquet Thursday night, December 6, 1928.

Mr. Smith appointed Mr. Herman Koch to act as temporary chairman.

The business meeting was adjourned and the meeting continued with a symposium on roses by Mr. Peters and Mr. Potter.

Special Session, 3:00 P. M., December 6, 1928

Nominating committee submitted the following names for the offices of the Wisconsin Garden Club Federation:

President: Mr. Huron Smith, Milwaukee, Mrs. R. Malish, Hales Corners.

Vice-president: Mrs. C. W. Vaughn, Madison, Mrs. R. Markham, Kenosha, Mrs. Dr. Peterson, Waukesha.

Sec'y-Treasurer: Mrs. Arthur Sperber, Hales Corners.

Ballots were passed and those in attendance voted for the above nominees, no further nominations being made from the floor.

The ballots were collected and counted after the program which continued with A Symposium on Rock Gardens by Mrs. Arthur Jaeger, No. Milwaukee and Mrs. R. Malish, Hales Corners and a question box on flowers by Professor J. G. Moore, Madison.

Meeting was adjourned.

Results of the election were announced at the banquet Thursday evening at 9 P. M. They were as follows:

President: Mrs. R. Malish, Hales Corners.

Vice-president: Mrs. C. W. Vaughn, Madison.

Sec'y-Treasurer: Mrs. Arthur Sperber, Hales Corners.

Signed MRS. ADAH SPERBER,
Secretary.

WHAT THE GARDEN CLUB FEDERATION CAN DO

MRS. R. H. MALISCH

WISCONSIN has a wide reputation for natural beauty as shown by the great number of out-of-state cars traveling over our highways year after year, headed for some particularly pleasing locality to spend the entire summer, or just on a general sight-seeing trip over the state.

We now have an opportunity of showing what we can accomplish through our new Federation of garden clubs.

What could be a finer project for the Federation to take up than beautifying the homes with flowers, shrubs, and trees, and truly making Wisconsin one of the most beautiful states in America?

You know how much your own garden club has accomplished. Even though you have not been able to do any particular big thing for your community, yet you have incited your neighbors to beautify their home grounds, and by so doing have made your town a better place in which to live.

How much more a Federation of garden clubs could do!

We can consult each other about our problems, have friendly competition between clubs, etc. At the December meeting some of those present expressed the thought that their own garden club was really still too new to think of joining a Federation. These new garden clubs may be benefited by the help a Federation of garden clubs can render.

As a Federation we can have the foremost authorities on gardening advise us and speak to us at our state meetings. Those unable to attend can read an accurate account of what was said and done in the Horticultural magazine.

It is my hope that all garden clubs in the state will take advantage of the benefits we are able to give them.

THE GARDEN CLUB OF SUPERIOR

WE ARE very glad to know that definite action was taken and the organization of the Wisconsin Garden Club Federation completed. We are having a joint meeting of our Club and the auxiliaries on the 10th of January, which will be a very opportune time to present the matter to all our members and I have no doubt the vote to join the Federation will be unanimous as we have all been anxiously waiting to know that the plan had been carried out.

The Garden Club of Superior

has a membership limit of thirty-five and has followed the plan of forming auxiliaries which are limited to twenty members, governed by the by-laws and under the jurisdiction of the parent club, co-operating with it in all its plans and sharing its privileges but fixing their own time of meeting and the amount of dues to be paid. The thought in having a small club and the auxiliaries was that smaller groups, working in various parts of the city would stimulate interest and be more far reaching in the results obtained.

A joint meeting of the club and the auxiliaries is held twice a year, the next one being on the 10th of January and at that time we have arranged to show the colored slides of delphinium, aquilegia and iris, with explanatory notes, which are sent out by O. M. Pudor of Puyallup, Washington. This is an evening meeting and open to all who may be interested.

Last year the Club took a correspondence course in landscape work with the National School of Landscape Design of Des Moines, Iowa. This proved to be a very worth while thing to do, not only furnishing a most excellent course of study but also giving splendid material for the programs at the regular meetings. A study class of about ten members met each week to intensively study the lessons and prepare the answers to the questions and a resume of this work was then given by one of the members of the study class at the regular meeting of the Club.

MRS. HERBERT A. JUNEAU,
Secretary.

WEST ALLIS CLUB MEETING

The next meeting of the West Allis Garden Club will be held at the home of Mrs. Cooper on January 16th. We are to begin a number of botany studies.

—MISS JENNIE LINDAUER.

DECEMBER PROGRAM OF SUM-MER-DEL CLUB

MRS. M. M. DAY

AT THE December meeting of the Sum-Mer-Del Garden Club held at the home of Mrs. H. G. B. Nixon of Hartland, a very interesting lecture on "Japanese Gardens" was given by Mrs. John C. Finney of Oconomowoc. Mrs. Finney's talk was made more vivid by personal reminiscences of her early life in Japan and by the description of her own Japanese Gardens.

Mrs. Finney said in part: "Japanese gardens must have winding paths leading to a gateway to provide seclusion. The gardens are of two kinds: hill or rock and flat or water. Waterfalls or rocks arranged to simulate waterfalls are used and sand may be used to simulate water. Water gardens must have curved bridges or stepping stone bridges. Stone lanterns are always present. In small gardens trees and shrubs are artificially planted and in the parks native trees are used. Grass does not grow there naturally and is consequently little seen."

An interesting feature of the day was the display of table decorations for the Christmas dinner brought and exhibited by the members of the club.

Because of the inclemency of the weather all business was dispensed with and the rest of the program omitted. Dainty refreshments were served by Mrs. Nixon.

Professor W. H. Alderman in his article on "Our Changing Horticulture" says that in his opinion Minnesota and Wisconsin growers are better off than those in most other parts of the United States, because they are living in consuming regions which are not yet producing enough to supply their own demands.

He makes the important statement however, that "a more and more discerning public will force them into the growing and marketing of high quality products only."

This means that consumers want good quality apples. There is a limited demand only for poor tasting varieties. One reason so many grocers and wholesale fruit men say that Wisconsin apples are not good is because such a large proportion of our cooking apples reach the table market and they get the opinion that Wisconsin produces nothing but the cooking apple varieties, whereas we produce some of the best eating apples found anywhere in the country.

We predict that the time will come when fruit growers will take the same action as the potato growers have done—eliminate all poor varieties and concentrate on a few of the best. Then the public will know that Wisconsin produces good apples and there will be a good market for them. In fact, the demand for McIntosh today is greater than the supply. Try and buy some!

MILWAUKEE SOCIETY DISCUSSES DUTCH BULBS

FRANK P. GILOTH

THE December Meeting of the Milwaukee Society was held December 19th, at 7:30 P. M. in the Trustees Room at the Public Museum.

Considering that the Holiday Season was upon us we had a very good attendance the program being devoted to "Dutch Bulbs".

The Meeting was opened by a Nature Poem which was read by Mr. Huron Smith and is entitled "Once More, Fields and Gardens".

The program consisted of a discussion about bulbs outlined as follows:

1. Varieties and kinds of Dutch Bulbs, C. Dix.
2. Treatment on receipt, E. P. Giloth.
3. Fertilization and soils, L. Potter.
4. Digging, storage and planting, L. Burmeister.

5. Methods of increase, A. Hill.
6. Insect pests, diseases, and treatment, A. Kron.

Our next meeting will be held January 22nd, and will be devoted to the subject of dahlias.

CONVENTION PRIZE WINNERS

(Continued from page 134)

Delicious:
1st, Ed. Stoeber
2nd, A. K. Bassett
3rd, Ralph Irwin

Northwestern Greening:
1st, Ed. Stoeber
2nd, A. K. Bassett
3rd, Ralph Irwin

Fameuse:
1st, Wm. Leonard
2nd, A. K. Bassett
3rd, N. A. Rasmussen

Windsor:
1st, A. K. Bassett
2nd, Ralph Irwin
3rd, L. E. Birmingham

Wolf River:
1st, Ed. Stoeber
2nd, A. K. Bassett
3rd, Jos. Morawetz

Salome:
1st, Ed. Stoeber
2nd, A. K. Bassett
3rd, Fred Kurtz

Westfield:
1st, A. K. Bassett
2nd, Robert Ward

Tolman Sweet:
1st, A. K. Bassett
2nd, Jos. Morawetz
3rd, J. A. Hass

Golden Russet:
1st, Robert Ward
2nd, Arno Meyer
3rd, Wm. Leonard

Willow Twig:
1st, Arno Meyer

Any Other Variety:
1st, Wm. Basse
2nd, Arno Meyer
3rd, A. K. Bassett

FIVE PLATES EACH OF FIVE COMMERCIAL VARIETIES

1st, Ed. Stoeber
2nd, A. K. Bassett
2nd, N. A. Rasmussen
4th, L. E. Birmingham
5th, Ralph Irwin

FLOWER PREMIUMS

Best Bunch Single Pompoms:
Locker & Sons, Milwaukee

Best Bunch Double Pompoms:
1st, Locker & Sons
2nd, Kennedy & Kennedy

Best Fifty Carnations:
1st, Kennedy & Kennedy
2nd, Locker & Sons

Best Twenty-five Light Pink Roses:
1st, Holton & Hunkel
2nd, Kennedy & Kennedy

Best Twenty-five Dark Pink Roses:
1st, Holton & Hunkel
2nd, Kennedy & Kennedy

Best Twenty-five Any Other Color Roses:
1st, Holton & Hunkel
2nd, Kennedy & Kennedy

Best Three Cyclamen Plants:
1st, Holton & Hunkel
2nd, Kennedy & Kennedy

Best Six Blooming Plants, Begonia:
1st, Holton & Hunkel
2nd, Kennedy & Kennedy

Best Specimen Boston Fern:
1st, Kennedy & Kennedy
2nd, Holton & Hunkel

Best Display Everlasting Flowers:
1st, John F. Hauser, Bayfield
2nd, Harriet Morley

Best Arranged Basket Cut Flowers:
1st, Locker & Sons

CULINARY VEGETABLES

Largest Onion:
1st, N. A. Rasmussen
2nd, Ed. Gassner

6 White Onions:
1st, Ed. Gassner

6 Yellow Danvers Onions:
1st, N. A. Rasmussen
2nd, Ed. Gassner

6 Red Onions:
1st, Ed. Gassner

3 Red Cabbages:
1st, N. A. Rasmussen

3 Winter Cabbages:
1st, Ed. Gassner
2nd, N. A. Rasmussen

3 Rutabagas:
1st, N. A. Rasmussen
2nd, Ed. Gassner

6 Chantenay Carrots:
1st, Ed. Gassner
2nd, N. A. Rasmussen

6 Blood Turnip Beets:
1st, N. A. Rasmussen
2nd, Ed. Gassner

1 Hubbard Squash:
1st, N. A. Rasmussen
2nd, Ed. Gassner

3 Table Queen Squash:
1st, Robert Ward

5 Tomatoes:
1st, Erwin Groth

Best Collection Vegetables:
N. A. Rasmussen

It may be news to some of you that Mr. A. E. Kunderd, the world's greatest Gladiolus man, has bought the peony and iris stock of Mr. Lee R. Bonnewitz, who is undoubtedly the best known peony and iris grower in the world. Mr. Bonnewitz was obliged to retire from the work on account of his health. Mr. Kunderd, it is reported, will resell the stock to the public the coming season.

A new bulletin entitled "Wisconsin Agriculture" a statistical atlas for 1926–1927 has just been issued by Mr. Walter H. Ebling, Agricultural Statistician of the State Department of Agriculture. It gives all the facts and figures in regard to the crop and live stock distribution etc. of the state.

Farming is still Wisconsin's leading industry. There are 193,000 farms in the state.

STRAWFLOWERS

In many colors and varieties
Baskets made up $1.50 to $3.50

We mail these anywhere. Add 50c for packing and postage.

HARDY PERENNIALS

200 varieties

Send for Catalog on Strawflowers and Perennials

Chequamegon Flower Gardens

V. E. Brubaker, Mgr.
Washburn, Wis.

National Potato Conference Held

ON DECEMBER 4th and 5th, three hundred representatives from forty-four different states met at Chicago and discussed problems relating to marketing and other phases of the potato industry.

The following are some of the resolutions adopted by the conference which are of special interest to our Wisconsin potato growers.

1. A resolution urging an increase of the existing duty on potatoes imported from any foreign country to the United States to $1.00 per 100 pounds.

2. Urging a reduction of ten to twenty percent in the potato acreage for 1929. The National and State Departments of Agriculture and other existing agencies, as banks, fertilizer companies, etc., are asked to help in this campaign.

3. The meeting went on record as being in favor of the grades for potatoes now known as United States Grades.

4. Endorsement of the shipping point inspection of potatoes.

5. Urging the increase of the existing duty on potato starch imported into the United States to $3.00 per 100 pounds, and on dextrine to $4.50 per 100 pounds.

6. A resolution favoring the compulsory branding or tagging of all potatoes shipped, showing weight and grade in accordance with the U. S. Grades.

During the conference a representative committee on resolutions met and reported the plan for the formation for the National Potato Committee, with representatives from different districts in the United States.

Mr. John Jardine of the A. M. Penny Company was elected to represent Wisconsin on this Committee.

This committee is to take up future problems of the potato industry in a national way.

Wisconsin Potato Notes

Gordon Westbrook of Harshaw, a 4 H Club member and Green Mountain exhibitor, who at the Wisconsin Potato Show also won first on Green Mountains, also won first at the Mid-West Show at Cedar Rapids, Iowa. In our December issue we stated that Mr. W. P. Jewell had won first place. The mistake was made in sending the sample of potatoes from the State Show at Rice Lake to Cedar Rapids. A tag bearing Mr. Jewell's name accidentally was enclosed and therefore the sample was exhibited under the wrong name.

Gordon Westbrook was the real owner.

Inspector John Brann finished the bin inspection of certified seed about December 1st and has started indexing Triumphs in the greenhouse at the College of Agriculture.

The first indexing is being done on large blocks of seed being offered for sale in order that prospective customers may know what to expect from the seed next year. The result of this check will be ready in February.

Professor J. G. Milward, in charge of the potato improvement work, is getting out a circular describing the Wisconsin plan of seed potato inspection together with a list of available certified seed for sale. This will be sent to the trade interested in buying seed and anyone else who may wish it.

CRANBERRY GROWERS HAVE ANNUAL CONVENTION

CLARE S. SMITH

THE Wisconsin State Cranberry Growers opened their annual winter session on Tuesday evening, December 4th, with a banquet at Hotel Weiter, Wisconsin Rapids. Over a hundred growers and friends were present. A short program and dancing followed.

At the business session, December 5th an interesting talk on spray and flood methods of insect control was given by Mr. E. L. Chambers, State Entomologist. Insurance ratings and values were discussed by W. J. Greve of the Employers Mutual Insurance Company of Wausau, and a resume of experiments and results as carried on by Vere Johnson on his marsh near Tomah. Discussions followed.

Copies of a recent bulletin on Cape Cod Cranberry Insects by Dr. H. J. Franklin of the State Experiment Station at Amherst, Massachusetts were distributed, also a booklet entitled "Cranberries in the Diet" by Miss Abbe Marlatt and Miss Raisbeck. Housewives should make special effort to secure a copy. It contains information on the growing and storing of cranberries as well as twenty pages of fine recipes.

May we suggest that the presidents of ladies clubs write to the Extension Service, College of Agriculture at Madison for enough copies for their members.

Pictures of the cranberry raking machine used on eastern bogs were of exceptional interest. Growers are seriously considering having a machine sent here for a demonstration on Wisconsin bogs next year.

Officers for the ensuing year are:

President—A. B. Scott, Valley Junction.

Vice-president — Capt. G. Nash, Wisconsin Rapids.

Sec-y-Treasurer — Clare S. Smith, Wisconsin Rapids.

A vote of thanks and appreciation was given to the retiring president Mr. Albert Hedler.

Potato Club Members Win at National Club Congress

BRUCE L. CARTTER
County Club Agent

WISCONSIN 4-H Potato Club members won high honors at the National 4-H Club Congress held at Chicago recently. They won the first five places on Rural New Yorkers, sweepstakes on early varieties and first on Early Ohios. In the State club class they won second. Wisconsin was represented by Marinette County, whose exhibit won first at the State Potato Show.

The National 4-H Club Congress, held each year as a part of the International Livestock Show is to Junior Growers what the Mid-West Exposition is to adults—the climax to achievement in showing ability.

It is at this show that 4-H potato club members from Marinette County have exhibited their samples in an attempt to uphold Wisconsin's potato supremacy in competition with Junior growers from other potato producing states. This is the third year that this Northern County has been selected by the state leaders to send the state exhibit into National Competition.

Competition at the 7th National Club Congress held this year at Chicago from November 30th to December 7, was based on state exhibits of 5 samples as well as on individual sample entries. Wisconsin's exhibit of Rural New Yorkers was a close second to Michigan's exhibit of Russet Rurals. Perhaps the most deciding feature in this failure to win first may be attributed to discoloration due to previous showing. The same samples were a part of the ten sample exhibit which placed first at the State Potato Show in Rice Lake.

In losing to Michigan this year, tables were reversed for in 1927 Wisconsin won 1st and Michigan 2nd. 1926 saw Wisconsin's exhibit from the same county placed 2nd with Minnesota at the top of the list.

Individual Winners

On Rural New Yorkers entered in individual competition the first five places were as follows: 1st, Julia Antonissen, Niagara; 2nd, Joseph Antonissen, Niagara; 3rd, Clarence Mortinson, Peshtigo; 4th, Orpha Antonissen, Niagara; 5th, Matt Russ, Wausaukee. First place on Early Ohios went to Theodore Antonissen of Niagara on a sample which won the same award at Rice Lake. George Bischof of Crivitz placed second on his Green Mountain sample.

The sweepstake award in the early variety class went to Angeline Biczak of Crivitz, being won on her fine sample of Triumps which previously was placed first in that variety.

These exhibits by Marinette County boys and girls represent only a part of the work done by Junior Potato growers in the county. For seven years this project has been under way and it has brought along with show success, the adoption of better cultural practices. Quality seed, seed treatment, use of fertilizers, a definite spraying program and tuber unit planting, all take a part in the development of these boys and girls as future farmers.

Above all they are developing an experimental mindedness, open to suggestions from outside sources.

THE NATIONAL HORTICULTURAL COUNCIL

THE fruit and vegetable interests of the country organized the National Horticultural Council recently for the purpose of protecting the horticultural interests of the nation. The first meeting was held at Chicago on October 31st. Bylaws were adopted and officers elected.

The council is organized with broad powers and will be in position to concern itself with any economic problems of fruit and vegetable growers, including legislation, tariff problems, transportation matters, standardization problems, fruit juice and by-product questions, trade practices, encouragement of improved methods of marketing, and collection of information on economic questions. The Council will not do any marketing. It may encourage and foster improved methods of marketing and assist in establishing better laws and regulations pertaining to the same, but will not engage in marketing itself, nor will it engage in the purchasing of supplies.

The officers are Mr. John Napier Dyer, Indiana President; F. L. Granger, Michigan, first vice- president; Frank T. Swett, San Francisco, Second vice-president; Charles E. Durst, Chicago, secretary-treasurer. M. C. Burritt of New York, Louis F. Miller, Ohio, and Charles Carmichael, Monette, Mo., are members of the Board of Directors.

Membership fees for the organization are $5.00 for individual members, $25.00 for horticultural societies and $50.00 for cooperative associations, plus 10¢ for each car above 50 handled by them.

Headquarters are at 608 S. Dearborn Street, Chicago and all correspondence can be directed to that place.

ORCHARDS GAIN FARMER FAVOR

A large group of Kewaunee county farmers are rapidly becoming interested in their orchards and their orchard problems. These farmers prune and spray when the time is right and they get good fruit too. Many farmers have already sold enough fruit to pay the taxes on their farm. Orchards like poultry have become, during the last two or three years a new and larger source of farm income.

County Agent Lathrope has passed on to the 300 orchardists on his list the classification of apples according to taste which have been made by C. L. Kuehner, orchard specialist, of the college of agriculture. Few individuals have the same taste, yet Mr. Kuehner has made a successful attempt to classify 27 varieties of apples into grades of excellent, good, fair and poor.

Of course, any classification of this sort is likely to arouse the ire of some one who takes particular liking to a certain variety of apples. But the idea is to show the trend of the public taste. An old standby such as Ben Davis is classified in the county agent's letter as being poor for eating and fair for cooking and that it should be used between January and June.

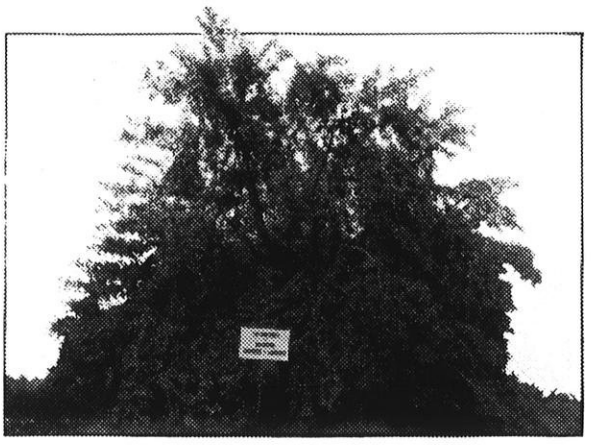
Among the apples classified as excellent to good for both eating and cooking are the winter banana, wealthy, snow (fameuse, twenty ounce, McIntosh, Grimes Golden, Jonathan, Seek-no-further, Golden Russet, Northern Spy, Tolman Sweet, Northwestern Greening, Delicious, Hubbardston Salome, Stayman Winesap, Windsor Chief, and Willow Twig.

Since beauty is only skin deep and the fact shows up in apples, in that many attractive varieties are poor for eating but some are excellent for cooking. Among these good cooking but poor eating apples are McMahon, Wolf River, Hibernals, Patten Greening, Pewaukee, Longfield and Ben Davis.

Special recommendation for baking is given the Wolf River, Patten Greening, Northwestern Greening and Stayman Winesap. Tolman sweet is known for its canning qualities and Hibernals for the delicious pies that it makes.

In Kewaunee county orchards the most common varieties according to County Agent Lathrope are Snow, McIntosh, McMahon, Wealthy and Northwestern Greening.

—Algoma Herald.



This 20-year-old apple tree in Mr. Blakslee's orchard, Medina, Ohio, has borne a 50-bushel crop.

FEED YOUR APPLE TREES
—and they will feed you

MR. ELIHU BLAKSLEE, Medina, Ohio, firmly believes that a generous application of available nitrogen annually enables apple trees to produce a good crop every year—instead of every other year when prices are low.

And records prove that Mr. Blakslee is right. Every year since 1921 when his orchard came into bearing, he has had a good crop. On two consecutive years Mr. Blakslee's 40-acre orchard has yielded about 20,000 bushels a year. One of his 20-year old York Imperial trees has borne a 50-bushel crop.

Mr. Blakslee is a consistent user of Arcadian Sulphate of Ammonia and his apple trees, like any other growing plant, respond to liberal applications of available nitrogen plant food.

513 BUSHELS
14-year record for one tree —

IN the orchard of J. E. Thornburg & Son, Ashland, O., is a 33-year-old Grimes tree fertilized with Arcadian Sulphate of Ammonia which has borne 513 bushels of apples in 14 years—*an average of over 36 bushels per year.*

Reports like this coming from all parts of the apple growing sections, prove conclusively that it pays to fertilize apple orchards with Arcadian Sulphate of Ammonia. Try Arcadian on your own trees. Our free booklet, "Arcadian Sulphate of Ammonia in the Apple Orchard," tells you how. Mail the coupon for your copy.

ARCADIAN
Reg. U.S. Pat. Off. by The Barrett Co.
Sulphate of Ammonia

The Barrett Company

Agricultural Bureau
New York, N. Y. Atlanta, Ga. Cleveland, O. Norfolk, Va.
Memphis, Tenn. San Francisco, Cal. Toronto, Ont.

The Barrett Company (address nearest office) N-3-29 NJ
Please send me free copy of "Arcadian Sulphate of Ammonia in the Apple Orchard." I am especially interested in.....
(Write names of crops on line above)
Also send me sample package of Arcadian Sulphate of Ammonia.
Name.....
Address.....
KINDLY PRINT NAME AND ADDRESS

Use of Poison Bait Not Illegal

E. L. CHAMBERS

WITH hundreds of laws written on our books and with each legislature adding more and more, it frequently happens that in drafting a law to cover a desired field it is unintentionally so written as to be greatly embarrassing in another field. For instance, during the last session of the legislature two bills were proposed and introduced, which the staff of the state entomologist's office discovered would prohibit the sale of certain insecticides and prohibit the use of poison baits and the spreading of poison for insect and rodent control.

Recently we were advised that an officer of the law was contemplating the prosecution of one of our orchardists because he was believed by this officer to be violating a statute, recently passed, when he used poisoned grain in his orchard to kill the hords of mice threatening his fruit trees during the winter months, under the snow. This bill was introduced by Assemblyman Gehrman on January 26, 1927, and referred to the Committee on Fish and Game. The bill was intended to protect wild animals and birds against poisoning by those who used this method in their capture and destruction. It read as follows:

"Section 1. A new section is added to section 29.24 of the statutes to read: (29.24) (4) It shall be unlawful to put out baits containing poison of any description for the destruction of any animal or animals; and the possession of any such poison or poison baits in a hunting or trapping camp or tent or on the person while hunting or trapping shall be prima facie evidence of a violation hereof. Provided, that during the months of May, June and July, in any year, a person may put out such baits for the purpose of destroying crows and gophers if he first obtains from the chairman of the town in which such poison is to be used a written permit so to do."

When this bill came up for discussion an amendment was proposed and adopted and consequently the law as passed reads as follows:

"Section 29.60 (5) (a) It shall be unlawful to put out baits containing poison of any description in any forests, fields or other places where it might destroy or cause the destruction of wild animals or birds, and the possession of any such poison or poison baits in a hunting or trapping camp or on any person while hunting or trapping shall be prima facie evidence of a violation hereof.

(b) It shall be unlawful to take, capture or kill or attempt to take, capture or kill any wild animal with the aid of dynamite or any other explosive or poison gas, or set any dynamite or other explosives near or on any beaver or muskrat houses. Any person who violates any of the provisions of this subsection shall be punished by a fine of not less than one hundred dollars nor more than three hundred dollars, or by imprisonment in the county jail not less than three months nor more than six months.

(c) **Nothing in this chapter shall prevent the state conservation commission** or its deputies from using dynamite or having dynamite in possession near beaver houses or dams for the purpose of removing beaver dams when the beavers are causing damage to property owners, **nor prevent any person from using poisoned baits, dynamite or poison gas with reasonable care for the destruction of injurious insects, rodents or English sparrows."**

Unfortunately the law is so written as to cause persons reading the first paragraph to believe that it is unlawful to use poison baits for mice or even to use this standard method of control for army worm and grasshopper outbreaks. However, if the third paragraph is read it clearly states that nothing in this law is intended to prevent any person from using poisoned bait with reasonable care for the destruction of injurious insects, rodents or English sparrows.

MOSAIC—FREE RASPBERRY PLANTS NOW PLENTIFUL

A PLENTIFUL supply of healthy raspberry plants for next spring's planting is indicated by a recent check of the Wisconsin nursery list, according to the state entomologist and chief nursery inspector of the Wisconsin Department of Agriculture.

During the last four years a determined effort has been made to reduce the amount of virous diseases in the raspberries of the state. Mosaic and leaf curl, two of these diseases, are responsible for most of the "running out" of small fruits. The Wisconsin Department of Agriculture has refused to certify for sale any plants from raspberry plantings where all diseased plants have not been eradicated. Raspberries brought into the state must also conform to this regulation.

It is known that there are many more acres in the state that could pass inspection. As the demand for certified stock increases more of these growers will feel justified in paying the small fee asked for the two annual field inspections required for certification. There is also an increasing demand by commercial raspberry growers for this inspection though no plants may be sold.

Florists tell us that the primrose and stevia do best at a temperature of 40 degrees. Begonias like it at 58 to 60 degrees and a cyclamen at 50 degrees.

No doubt one main reason why so many people aren't successful in growing these flowers indoors is due to excessive heat. Try keeping them in a room that can be closed off and kept quite cool.

The final potato production estimate on December 1, 1928 was 462,000,000 bushel as compared to 465,000,000 bushel on November 1st. Last year there were 402,000,000 bushel and the average for the five year 1922–26 was 393,000,000 bushel.

NORTH DAKOTA NOTES

SECRETARY A. F. YEAGER

Very often we get a letter in which someone states they have used tobacco solution on plant lice without controlling them. In that case we can only recommend strengthening the tobacco solution. Plants will stand much more than the proportions recommended on the extract package.

One of our members suggests that the reason why cabbage may produce several small heads instead of one large one may be due to cut worms climbing up and eating out the central bud. His explanation sounds reasonable.

The more we see of it the more we believe that the Volga, or winter watermelon, is our most useful variety. It is early enough to mature, is of very good quality, and may be stored for a long time. We have specimens picked over two months and kept under anything but ideal storage conditions which are very good to eat now.

There is considerable favorable comment on small hot-water heaters for hotbeds. It is said that they cost much less than manure hotbeds and operate more satisfactorily.

One of our most serious running out diseases of potatoes is spindle tuber. The Maine Experiment Station reports that this disease may be spread from diseased to healthy tubers by the cutting knife. They report a 23% infection in this way.

Dean H. L. Walster, returning from a flower show at Washington, says we should be doing more with Siberian Iris. Two varieties he especially mentioned are Caterina and Snow Queen.

The National Garden Bureau reports that the sale of flower seed packets has increased in the United States more than 30% since 1922, while the sale of vegetable seed packets has decreased.

"Roadside Marketing" is the title of a little book published by Orange-Judd Company of New York. The price is $1.25.

The best size of onion sets is from ½ to ¾ inch in diameter.

OUR CHICKS PAY

LEEREMAN'S

Quality Accredited

HICKS

Are Money Makers. Place your order with us and decide for yourself.

CLEEREMAN'S HATCHERY

Green Bay, Wis. R2J

Life Member W. S. H. S.

90% of the farms in Wisconsin have automobiles and 25% have motorcycles. 51% report telephones and 20% have radio sets.

Bordeaux Mixture

Arsenate of Lead

Calcium Arsenate

Arsenite of Zinc

Dritomic Sulphur

Sulphur Dusts

ORCHARD BRAND SPRAY and DUST MATERIALS

Whether You Spray or Dust

YOU are investing material plus labor. You must have results or you will lose not only your money spent but crop profits, too! Play it safe and buy "Orchard Brand" Materials. They are the standard of dependability.

GENERAL CHEMICAL COMPANY

40 Rector Street, New York

St. Louis Los Angeles San Francisco

GCI 58

ORCHARD BRAND

REG. U.S. PAT. OFF.

SPRAY & DUST MATERIALS

SUCCESS WITH APPLES AND CHERRIES

(Continued from page 143)

the rate of a certain number of trees per acre. Since the death rate has been low for these trees, 100 to the acre was used instead of 108 (the actual number per acre when set 20 ft. apart each way). The soil in Block K is less fertile on the whole than in any of the other blocks of Montmorencies. The trees have probably had a trifle better early-season cultivation and hoeing, but spraying has been equally well done in all blocks. No great difference could be attributed to difference in fertilizer applications since none of the blocks were fertilized during the first five years of their growth. The only clear-cut difference in management between these blocks has been in pruning.

The trees in Blocks C, D, and L were pruned rather severely each year. This pruning consisted in taking out cross branches and twigs where the tops appeared too thick. The trees in Block K were pruned during their first two or three years in the orchard to obtain a proper head but no later pruning was done until to the 9th year. However, they have now reached the point where I have had to thin out the weakest branches in the center, somewhat. It is believed that Blocks C, D, and L were so overpruned during their non-bearing period that their bearing was delayed and their early crops materially and unnecessarily reduced. The records show that Block K is five years ahead of Blocks D and L and three years ahead of Block C in production.

The statements which have just been made, however, should not be interpreted as a recommendation against all pruning in the cherry orchard. I believe that there are benefits derived from pruning. Undoubtedly pruning increases the size of the fruit, altho exceptionally large sour cherries are not particularly wanted by the canner. It is occasionally desirable to prune severely to stimulate growth in a weak tree. The evidence is clear, nevertheless, that in so far as yield is concerned pruning has just one influence. Therefore caution, judgment and conservation should be used when going into the cherry orchard with the pruning saw.

Now-a-days little need be said concerning the necessity of spraying. Economy by less spraying usually results in being penny wise and pound foolish. However the tendency of the times does lead to larger and more powerful sprayers, to speed up application and to do the job more thoroughly. A friend of mine in Ohio reports a record, I think, for number of gallons sprayed in ten hours. It was 24–300 gal. tanks. One man drove the tractor, one man sprayed, one outfit kept the machine replenished with spray material.

In Michigan we need a nitrogen fertilizer for most of our soils. So far no other element has demonstrated its value, except indirectly for the growing of cover crops. Most Michigan soils need humus. Maintaining the humus in the orchard is imperative for its success, but it is equally true that with few exceptions clean cultivation during the spring and early summer is just as important.

In conclusion let me urge to the prospective fruit grower the importance of having a good start by including in your program a consideration of the proper site, variety, distance of planting, conservative pruning, intelligent use of fertilizer and humus maintenance along with intensive spraying and cultivation. Modifying any of these things for economy sake usually results in false economy, as it reduces yield or quality or both, which increases the cost.

CANNA INDICA OR INDIAN SHOT

JULIUS ERDMAN
Superintendent Mitchell Park Conservatory

THESE handsome and stately plants have been wonderfully improved by plant breeders during the last decade. At first the cannas were only prized as foliage plants. The petals were narrow and the flower was unattractive. Now we have an excellent series of wonderful cannas with superbly colored gigantic flowers, most of which are of easy culture and great value for the garden, where they are planted in formal beds or mixed in the perennial border. They require a warm sunny location and lots of water during their growing season and rich, well manured ground.

Cannas were first grown in Europe and later introduced to America where many fine varieties have been raised since. They set seed rather freely, so that anyone can take a few good flowered sorts, pollinate the flowers, and among the resulting progeny will be found some as good, if not even better than the parents.

A new race has recently sprung up known as the Orchid-flowered Cannas. These have been secured by crossing the Crocy section with the large, yellow flowered Canna flaccida. The flowers are very large and showy but the direct cross between the two is not very suitable as a bedder, owing to the soft nature of the segments. Further selection and cross-breeding, however, have given us some of our finest bedding cannas of today.

Some varieties of Cannas are grown for the large, musa like foliage alone. These are either slightly variegated or with leaves dark red. Canna musaefolia and Canna Black Beauty are perhaps the best of this class.

LAW GOVERNING SIZE OF FRUIT AND VEGETABLE CONTAINERS

THE U. S. Department of Agriculture issues the following statement in their market news service:

"The U. S. Standard Container Act of 1928 establishes standard sizes for hampers, round stave, straight side, and tub baskets and splint or market baskets. Growers who possess baskets which do not conform to the law will not be allowed to use them after November 1, 1929. Growers should regulate their purchase of such containers so as to be sure of using all of non-standard size before date mentioned.

Another effect of the law is to make inoperative all State laws fixing weights per bushel for fruits and vegetables when these are sold in the standard baskets established by the law. Copies of the law may be obtained by addressing the U. S. Department of Agriculture, Washington, D. C. and asking for S. R. A. 116.

OUR CHANGING HORTICULTURE

(Continued from page 137)

be such a development of the fruit industry that we are in danger of over-production and have in fact doubtless reached a period of over-production with a few individual fruits. In years when the crop of fruit is good in all parts of the country prices will undoubtedly fall below the cost of production, but these years do not always happen, and when there is a low production in certain fruits, or a crop loss in certain regions, the whole industry will enjoy prosperity. Certainly we should not encourage general expansion of fruit planting until such a time as the population of the country shall have increased to a point that will warrant increased production. There are, however, opportunities for local expansion of the fruit industry in certain regions of the country.

There is no doubt but what the upper Mississippi Valley enjoys an especially favored geographic situation. We have good markets close at hand, both for local trade and carlot shipments. We can produce apples and other fruit of high quality that can and do compete successfully with the products shipped in from other regions. Saving in freight, the advantages of a local market over a distant market would seemingly warrant the states of Wisconsin, Minnesota and Iowa to increase in a conservative manner their plantings of the fruits which succeed under their conditions. We must bear in mind, however, the competition from other sources and a more and more *discerning public will force us into the growing and marketing of high quality products only.* The time has passed when any money can be made from the production of poor quality fruit or the marketing of a low grade product.

It has been aptly demonstrated that we can produce a high quality product. We must begin now to specialize on products of first class quality. With some notable exceptions, we have not yet developed the art of packing and grading to secure a standard product. To this phase of the question we must undoubtedly give more serious attention in the future.

On the whole, I believe that Minnesota and Wisconsin growers are better off than those in most other parts of the United States and that we should be duly grateful that we are not living in the midst of the great fruit belts, but rather in a great fruit consuming region which is not yet producing enough to supply its own demand. In the filling of this local demand with high quality fruits lies the opportunity for our own growers.

INDEX TO ADVERTISERS

	Page
American Farm Machinery Co.	158
Bahr Nursery	158
Barrett Company	153
Bolens Tractor	158
Chequamegon Flower Gardens	150
Cream City Chemical Co.	160
Cumberland Fruit Package Co.	157
Fitchett Dahlia Gardens	159
Gelbke, C. A. & Sons	158
General Chemical Co.	155
F. R. Gifford Co.	159
J. F. Hauser	158
Rasmussen's Fruit Farm & Nurseries	160
Sisson's Peonies	160
Stonecrest Gardens	158
W. A. Toole	159
White Elm Nursery	159

Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

SHRUBS — ORNAMENTALS — ASPARAGUS Plants. West Park Nursery, C. A. Gelbke and Sons, Appleton, Wis.

NURSERY STOCK

FOR SALE: NURSERY STOCK. FRUIT and ornamental trees. Shrubs and perennials. Send for list. Bahr Nursery, Manitowoc, Wis.

SPECIAL FRUIT AND POTATO GROWERS MEETING DURING FARM FOLKS WEEK

WHEN Wisconsin potato and fruit growers meet at Madison, February 4–8, during Farm Folks Week they will hold two special sessions. The potato men will hold their conference on February 6, and the orchardists will meet on the following day.

In addition to their two special programs, however, horticulturists will find much of interest in the main program which has been arranged.

Many speakers of national reputation have been scheduled, including James E. Poole, veteran market reporter; L. J. Tabor, master of the National Grange; O. E. Reed, chief of the Dairy Bureau of the United States Department of Agriculture; A. J. Glover, editor of Hoard's Dairyman; and M. F. Cudahy and Oscar Mayer, Jr., well known in the meat packing world, as well as members of the college staff.

The potato growers meeting will open at 8:30, Wednesday morning, February 6, in the horticulture building of the college. Among the problems that the growers will consider are ways of improving culture methods and seed, the control of pests, and methods of indexing potatoes to get the best seed stock. J. G. Milward, and J. W. Brann of the agricultural college staff will meet with the growers.

There will also be held a special conference of seed growers at which their special problems will be considered.

R. H. Roberts and C. L. Kuehner, members of the college staff, are meeting with the fruit growers, Thursday, February 7 at 8:30 to discuss practical farm orchard management problems.

Some questions which will be considered are: what varieties shall we plant in the spring of 1929? how and where do spray ring members sell their fruit? shall we adopt the pruning practices of commercial growers? and how can we reduce the cost of spraying?

A special program has also been arranged for the women. It will include in addition to lectures and discussions on food, clothing, and family relationships, a special demonstration of labor saving equipment for the home.

DUTCH BULBS

(Continued from page 141)

fill in around and above them. The tops of the bulbs need not be more than one half inch before the surface. Select the coolest corner of the cellar and set the pots on the floor packing wet leaves around them and covering with an old piece of carpet or burlap to hold the moisture. Examine them occasionally, giving water if the soil in the pot seems to be drying out. The roots will start growth and in three or four weeks the Roman Hyacinths and paper white narcissus can be safely brought up into heat and light. It is best to leave the ordinary hyacinths, daffodils and tulips in seclusion for five or six weeks. Florists bring the potted bulbs to light and warmth gradually and only a few at a time—holding some back for later bloom. By duplicating this you can have bulbs bloom in your home.

6 Peony Roots for $3.00
12 Fine Peony Roots, $5.00
100 Choice Gladiolus Bulbs $2.00
10 each of 10 kinds labeled,
FOB by Express. October and November delivery
Send For Catalog
Stonecrest Gardens
Eau Claire, Wis.

HARDY PERENNIALS
New & Standard Varieties
300 Kinds
Strawflowers—All Varieties
J. F. HAUSER
Bayfield, Wisconsin
Send for Price List

KINKADE GARDEN TRACTOR
and Power Lawnmower
A Practical Proven Power Cultivator for Gardeners, Suburbanites, Truckers, Florists, Nurserymen, Fruit Growers, Country Estates and Poultrymen.

AMERICAN FARM MACHINE CO.
1085-33rd Ave. S. E. MINNEAPOLIS, MINN.

BOLENS
GARDEN TRACTOR

Does Garden Plowing, Harrowing, Seeding, Cultivating, Spraying and Lawn Mowing.—Also mows hay, weeds and other tall growth. Attachments instantly interchangeable. New improved Tools, Arched Axle, Tool Control, Power Turn, Snappy Powerful Motor, Pulley for Belt Work, and many other features. Has solved the problem of thousands of gardeners, florists, poultrymen, nurserymen and suburban farmers. Time Payment Plan. Write GILSON MFG. CO., Park St., Port Washington, Wis.

TABLE OF CONTENTS

	Page
Free Plant Premiums	130
Growers and Nurserymen Donating Nursery Stock	131
Our 59th Annual Convention	132
Our Changing Horticulture	135
Making A Rock Garden	138
Simple Control for Crowngall	139
History of the McIntosh Apple	140
Dutch Bulbs	141
Success With Apples and Cherries	142
Our New Officers	144
Editorials	144–145
Garden of My Dreams	146
Improving Our Flower Shows	146
National Peony and Iris Meeting	147
Garden Club Activities	148
National Potato Conference Held	151
Cranberry Growers Annual Convention	151
Potato Club Members Win	152
Use of Poison Baits Not Illegal	154
North Dakota Notes	155

SPRAY MATERIALS

Lime sulphur solution
Lead arsenate
Dendrol

PRUNING TOOLS

Saws Shears
Pole Pruners

FERTILIZER AND LIME SPREADERS

Nitrate of Soda
Sulphate of Ammonia
Mixed Fertilizers
Geyer End Gate
Spreaders

F. R. GIFFORD CO.
2201 University Ave. Madison, Wis.

White Elm Nursery Co.
Hartland, Wisconsin
General Line of
Ornamentals and Fruits

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which described as well as dozens of Hardy Perendainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

We aim to grow

Good Dahlias

Bulbs that will produce in your garden blooms as good as—or better than—you saw in our garden or at our various exhibits last fall. Catalogue on request. Early orders accompanied by cash receive a special premium.

Fitchett Dahlia Gardens
735 E. Milton Avenue
JANESVILLE, WISCONSIN

Dependable—

That is a quality we constantly strive for; we want every customer to feel confident that his orders will be cared for in a dependable manner, and that the plants he receives will be of highest quality and absolutely true to name and description.

We grow a complete line of fruit and shade trees, ornamental shrubs, perennials, climbing vines, berry plants, etc. consisting of the best varieties.

—Catalog on Request—

Visitors Always Welcome

RASMUSSEN'S

FRUIT FARM AND NURSERIES

Oshkosh **Wisconsin**

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

Profit Most By Using The Best

Wisconsin Made

Spray Materials

At the Right Prices

Lime Sulphur (Liquid and Dry)

Arsenate of Lead,

Calcium Arsenate,

Bordeaux Mixture (Paste and Dry)

Nicotine Sulphate,

Cabbage Maggot Killer

Products of

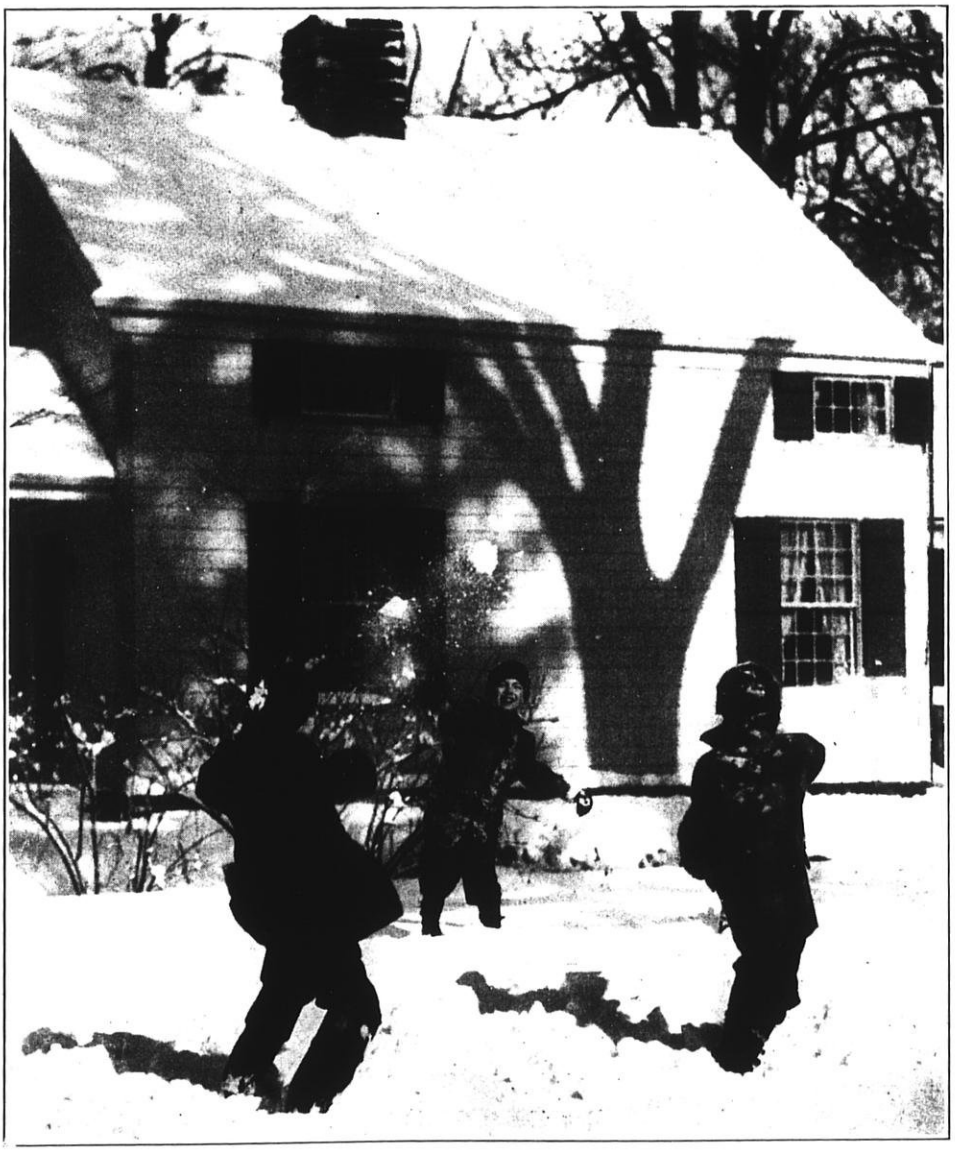
Cream City Chemical Works

766-774 Kinnickinnic Ave.
MILWAUKEE, WISCONSIN

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

Vol. XIX FEBRUARY, 1929 No. 6



Latham Raspberry Plants
State Inspected
$2.50 per 100 $20.00 per 1,000
Free from mosaic and other diseases

Strawberry Plants
Senator Dunlap; Premier
100 ..... $ .75
1,000 ..... $ 5.00
Progressive
100 ..... $ 1.25
1,000 ..... $10.00
Mastodon
100 ..... $ 2.00
Order Early
FRED HECKLINGER
Route 7 Menomonie, Wis.
Phone 520-W

BARGAINS

100 Finest Glad Bulbs
10 each 10 kinds spring delivery for $2.00 F. O. B. $2.25 Postpaid.

April — May — July — Aug. delivery 6 Choice Peony Roots for $3.00

Postpaid Sept. and Oct. delivery

Send for catalog, it's free.

STONECREST GARDENS
Eau Claire, Wis.

Specializing
in
Gladiolus, Peonies
send for list
JOHN GUMTZ
Merrill, Wis.

STRAWBERRY PLANTS

	Per 100	1000
Premier	$ .80	$6.50
Minnehaha	.80	6.50
Minn. 999	.80	6.50
Sen Dunlap	.75	6.00
Warfield	.75	6.00

Cash with order, please
MRS. ALFRED JOELSON
R 1 Chetek, Wis.

Excelsior Nursery
CHAS. HARALSON
Wayzata, Minn.

Growers of Minnesota new fruits and other hardy nursery stock for the Northwest.
Write for price list.

GLADIOLUS

1 dozen Gladiolus bulbs, all large, 12 different varieties, packed separately and labeled, one dollar, postpaid for February and March.

A Few Specials In Large Sized Bulbs

	Per bulb
Avalon	15¢
Tiplady	10¢
Lacinatus	25¢
Peach Rose	25¢
Baron J. Hulot	10¢

FLORIADALE GARDENS
Wm. R. Leonard, Prop.
Route 1 Ft. Atkinson, Wis.

FOR SALE
Strawberry plants—Senator Dunlap, Gibson, Dr. Burrill, seven other kinds. Tree Strawberry. Everbearing Progressive, Mastodon Champion. Everbearing Raspberry, St. Regis, Latham.
Dahlias—Gladiolus—Peonies.
State Inspected. Write for prices
CHAS. J. BEIER Stoddard, Wis.

Gladioli, Irises, Lilies and hardy perennials. Beginners collection mixed glads, $1.00 per 100, 1 inch size.
The Far North Gardens
Iron River, Wis.

WILD FLOWERING PLANTS

Make city lot or large estate beautiful-valuable-interesting. Flowering land and water plants-berry-bearing shrubs that attract birds-fish-animals.
Suggestions-*price list free.*
Terrell's Aquatic Farm
1008W Blk., Oshkosh, Wisconsin

HARDY SHRUBS

Our catalog contains a complete list of hardy shrubs, Wisconsin grown, at bargain prices.

GARDEN SEEDS

Our Wisconsin grown garden seeds are unexcelled for earliness, hardiness and productiveness.
Our catalog is filled with special prices on farm, garden and flower seeds, plants and shrubs.

Send for free copy today.

J. W. JUNG SEED CO.
Box 48, Randolph, Wis.

Nursery Stock
Seed Grains
Landscape Service

BAKER NURSERY & SEED CO.
Fond du Lac, Wis.

10 Delphiniums $1.20
Gold Medal Hybrids, 6 Plants 70c Prepaid
25 Gladiolus Bulbs $1.00
Improved, Wonderful Shades Mixed Varieties
6 Elegant Lilies $1.00
Dwarf, scarlet upright flower Blooms in June
8 Tiger Lilies $1.00
Fall, red spotted flower July bloomer
Full line Minnesota Station new fruits, Apples, Plums, Cherries etc.
Nursery Catalog Free
Order Now—Spring Shipment
SWEDBERG BROS. NURSERIES
Battle Lake Minnesota

Ask for our catalog listing 100 varieties of Dahlia and Gladiolus bulbs
COLUMBIA GARDENS
Cedarburg, Wis.

Selected Latham Raspberry plants. From high grade stock. Mosaic Free Inspected Two years.
$50.00 per 1,000 $30.00 per 500
$17.50 per 250 $ 7.50 per 100
A. B. RUSSELL
Route 1, Eau Claire, Wis.

TO PLANTERS

Hundreds of Varieties
Millions of little trees, shrubs, plants and tree seeds.

Write for price lists

American Forestry Co.
Pembine, Wisconsin

FREE PLANT PREMIUMS

Offered To

Members of the Horticultural Society

By

Wisconsin Nurserymen and Growers

Who May Receive Them

Individual annual members: Plants sent free, postpaid to:

1. All new, annual members, sending in $1.00 membership fee before April 1st, 1929.
2. All old annual members sending $1.00 for renewal before April 1st, and sending names of three prospective members. Membership will be extended from date of expiration.
3. Annual members sending in $1.00 for one **new member** may retain 50c or one-half of their own membership fee, or we will extend their membership six months.
4. For every new member at $1.00 sent in a plant premium may be selected.

Local Societies Or Clubs Affiliated With The Horticultural Society

All members of affiliated organizations whose dues are received before April 1st may select plant premiums but we must charge them the actual cost of packing and postage which is 15 cents. The Society has agreed to pay this amount to each grower who sends out the plants. Due to the low membership fees charged organizations we cannot pay this as we do with the $1.00 memberships. Memberships will be extended from date of expiration.

Members affiliated through local clubs sending in $1.00 for a new annual member may select one plant premium for each new member secured. New member may also select a premium.

Send membership fees and choice of premium to Wisconsin State Horticultural Society, Washington Bldg., Madison, Wisconsin, at once. First come, first served.

Growers and Nurserymen Donating Plants, Bulbs and Nursery Stock

We have some new premiums this month. Look them over. In case varieties are not given, send to grower for catalog and make your selection. Send for catalogues anyhow!

In ordering, give 1st, 2nd and 3rd choice—in case supply is exhausted.

New Premiums Since the January Issue

WHITE ELM NURSERY COMPANY
Hartland, Wisconsin

100 Aquilegia, L. S. Hybrids
50 Asclepias Tuberosa
50 Gypsophila Paniculata
50 Gypsophila Repens
50 Heuchera
100 Platycodon
50 Phlox Sublata Pink
Premium: 3 plants

100 Arabis Alpina
50 Centaurea Macrocephala
50 Gypsophila Acutifolia
200 German Iris — named varieties, our selection
50 Limonium Latifolia
50 Phlox Pantheon
50 Phlox Sublata white

FLORIADALE GARDENS
Wm. R. Leonard, Ft. Atkinson, Wis.

Gladiolus Bulbs:
100 Alice Tiplady
100 Roanoke
50 White Butterfly
Premium: 5 bulbs.

H. B. BLACKMAN, Richland Center, Wis.
Fruit Grower and Nurseryman

100 Latham Raspberry mosaic free stock
100 Gladiolus bulbs—named varieties
100 Strawberry plants—Premier or Minnehaha
Premium: 10 plants or bulbs, choice of two varieties.

MENOMONIE-EAU CLAIRE NURSERIES Inc., Menomonie, Wis.

500 Mixed Primulinus Glads
Premium: 10 bulbs

50 Assorted Dahlias
Premium: 4 roots

BAKER NURSERY AND SEED COMPANY
Fond du Lac, Wis.
500 Gypsophila (Baby's Breath)
Premium: 4 plants.

AMERICAN FORESTRY COMPANY
Pembine, Wis.
1,000 American Arbor Vitae, size—18 to 24 inches
Premium: 2 trees.

V. E. BRUBAKER, CHEQUAMEGON FLOWER GARDENS
Washburn, Wis.
500 Lupine plants
Premium 5 strong plants

H. C. CHRISTENSEN
Oshkosh, Wis.
100 blooming size Regale lily bulbs
Premium 2 bulbs
500 planting size Regale lily bulbs
Premium 10 bulbs

COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.
500 German Iris, named varieties
Premium 2 rhizomes
500 Gladiolus bulbs, named varieties
Premium 4 bulbs

W. A. DANA, STONECREST GARDENS
Eau Claire, Wis.
1,000 blooming size gladiolus bulbs
Premium 6 bulbs, 2 each of 3 varieties
Varieties: Le Marshal Foch, light pink; E. J. Shaylor, rose pink; A. B. Kunderd, cream pink ruffled; Carmen Sylvia, best white; Jewell, salmon and yellow; Salmon Beauty, salmon; Crimson Glow, bright red; 1910 Rose, light rose pink; Los Angeles, shrimp pink; Mr. Mark, blue; Pink Wonder, large light pink; Dorothy Wheeler, choice pink.

JOHN F. HAUSER, SUPERIOR VIEW FARM
Bayfield, Wis.
Delphiniums and Shasta Daisies, strong one year old plants
Premium 10 plants

DAHLBERG NURSERIES
Ladysmith, Wis.
50 Spirea Van Houtte–2–3 feet
Premium: 1 plant

J. T. FITCHETT, FITCHETT DAHLIA GARDENS
Janesville, Wis.
100 Dahlias
Special. 1st 50 orders may have "Bashful Giant", largest Dahlia, retail value $1.00
Balance: Choice of one 75c variety or one 50c and one 25c, or three 25c varieties

McKAY NURSERY COMPANY
Madison, Wis.
200 two year, No. 1 Concord Grapes
Premium 2 plants

THE NORTH STAR NURSERY CO.
Pardeeville, Wis.
50 Hydrangea Paniculata G 12-18″
50 Coralberry or Indian Currant 18-24″
Premium 1 shrub, either variety

RASMUSSEN'S FRUIT FARM AND NURSERY
Oshkosh, Wis.
Choice of any plants listed in catalog to value of $1.00
Package, 1 doz. each, Oshkosh Strawberry plants
French Delphiniums
Premium 1 package

W. A. SISSON OF SISSON'S PEONIES
Rosendale, Wis.
100 peony roots, named varieties
Premium Choice of one $1.00 root
100 iris, named varieties

SWARTZ NURSERY
Kenosha, Wis.
100 Excelsior climbing roses
Premium 1 plant
100 Spiraea Vanhoutte
Premium 1 plant

W. A. TOOLE, GARRY-NEE-DULE
Baraboo, Wis.
150 Delphiniums, blue hybrids
100 Delphiniums, Belladonna
50 Phlox Siebold 50 Phlox Rheinlander
50 Phlox Miss Lingard
100 Canterbury Bells
50 Aquilegias, long spurred hybrids
100 Shasta Daisies 50 Coreopsis lanceolata
50 Gaillardia grandiflora
50 Oriental Poppy
50 Platycodon 50 Pyrethrum roseum
Premium choice of 3 plants

Send direct to grower for price list in case you wish additional plants or bulbs

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS

President
C. J. Telfer, Green Bay

Vice-President
M. B. Goff, Sturgeon Bay

Secretary
H. J. Rahmlow, Madison

School and Home Beautification Project for Club Members

W. McNEEL
Junior Extension Forester

WISCONSIN, like every state, is encouraging its farm boys and girls to undertake some creative work connected with the farm and the farm home.

It requires no special intelligence or imagination to see what is possible in the way of correct attitudes, increased ability, and enduring attachments resulting from this form of creative education. It is called 4-H club work and embodies a great many types of work. But most of the work brings some annual financial returns. Such projects have been so successful in so many cases that pressure is being exerted to get some of our farm youth to carry on the work in which the returns are neither immediate nor financial.

Among these new types of work are the Junior Forest Rangers of Wisconsin, described in a previous issue of The Wisconsin Horticulture, and Home and School Beautification Projects, described in this article.

This work has no precedent in practice among youth, unless it be in the 4-H flower gardens of West Allis, the program of work carried on by the Junior Forest Rangers of Wisconsin, and the sporadic efforts of various organizations of youth. Financial rewards take an inferior part in providing incentives. The rewards are "by the way" in the joys of learning, and in the idea of service to the home and to a worthy cause.

Forester McNeel and son out in the open spaces.

Here we have it—a definite "Home Grounds" project for boys and girls. We recommend it to county agents, teachers, club leaders and garden club members.

This project is well adapted for 4H clubs in country, village or city. With the increasing interest manifest in beautifying school and home grounds we hope a large number of clubs will be organized.

The Horticultural Society will give special premiums to winners in this project.

It takes some faith in American youth to believe that they can find the incentives necessary to continuous endeavor in this type of project. There are those who have this faith. They believe that farm youth can be joyously employed in beautifying home and school grounds, and the roadsides along their farms. This outline of work comes in response to a call from those having this faith—county agents, country school teachers, and local club leaders.

Purpose of the Project

It is designed to teach boys and girls collectively, as in the school nursery, or individually, as in the home nursery, how to grow their own shrubs, trees, and perennial flowering plants for beautifying the home and school grounds. The work offers youth a chance and an incentive to study nursery practice and some of the principles of landscape gardening. The members will find joy in the

work, and home and school and their surroundings will take on new charms because of the endeavors made.

Those fostering the work have visions of barren school grounds improved and home surroundings made beautiful through efforts of the children themselves.

The School Nursery

It is impossible to give a description covering every situation. This one covers a school with an enrollment of twelve pupils in sixth, seventh, and eighth grades. It is intended as the smallest piece of work that any school can undertake. It can be enlarged to meet the needs of larger schools and the increased capacity and enthusiasm of older boys and girls. Village high schools, or classes in nature study in city schools will find this work very suitable, with certain modifications.

A portion of the school grounds is set aside for the nursery. The space should contain at least 240 square feet. It should be in the corner of the grounds where it will not interfere with the right of children to have room for play. It should have sunlight, at least a portion of the day, and should be fenced off or otherwise protected. The ground within this space must be well prepared by thorough spading and mixing of the soil, just as the soil in the garden is prepared. If the soil is heavy, mix in some sand and humus; if light, add plenty of humus, rotted leaves, preferably.

The space is divided, first, according to grades, giving to each an area according to the number of pupils enrolled; then to each pupil is allotted a space of 20 square feet (including a portion of the dividing path) within his grade section.

This space will be sufficient for each to grow at least five shrubs of each of the following species of shrubs, (25 in all); three plants each of the two kinds of trees (6 in all); and two plants each of the three perennials (6 in all), given in the lists below. These lists differ somewhat because of different climatic and soil conditions in the three counties that have elected to promote this work.

PREMIUM OFFER BY HORTICULTURAL SOCIETY

In each County in which there are at least two demonstration teams in the Home and School Beautification project the following prizes will be offered.

The best demonstration team—Cash prize $10.00
Second prize 5.00

The above winner must be determined at a public contest at which at least two teams compete.

Notices of intention to enter this contest should be sent in by August 15.

For the three outstanding club members in any regularly organized Horticultural club, we offer a free membership in the Horticultural Society, which includes the magazine Wisconsin Horticulture for one year.

For the school making the most progress in school ground beautification, as judged by the State Club Department and from reports made by club leaders, we offer—20 shrubs and trees, the varieties to be determined from plans made for the school by the State Horticultural Department.

Plants for Washburn County

Shrubs: Spirea Arguta, Spirea sorbifolia (Ural-False Spirea), Spirea froebelli (Froebel Spirea), Cotoneaster acutifolia (Pekin Cotoneaster), Physocarpus opulifolius (Common Ninebark), Rosa rugosa variety Hansa (Red Rugosa Rose), Lonicera tatarica rubens (Rosy Tatarian Honeysuckle), Cornus siberica alba (Red Osier Dogwood), Yellow Barberry.

Trees: For decoration, Sorbus Americana or American Mountain Ash. For Shade, Acer rubra, or common red maple. (Both of these species can be grown from seed by these children without difficulty). White Elm.

Perennial Flowering Plants: Delphinium or larkspar, Coreopis, and Rubeckia Newanni.

Pierce County

Shrubs: Spirea van houtti, Spirea sorbifolia (Ural False Spirea), Spirea froebelli (Froebel Spirea), Cornus siberica alba (Coral Dogwood or Red Osier), Cotoneaster Acutifolia (Pekin Cotoneaster), Lonicera tatarica rubens (red boneysuckle), Rosa rugosa variety Hansa (Red Rugosa Rose).

Trees: Sorbus Americana (American Mountain Ash) for decoration, Ulmus Americana (American White Elm) for shade. (Both of these can be grown from seed without difficulty).

Perennials: Delphinium, Coreopsis (blanket flower).

Milwaukee County

Shrubs: Spirea van houtti, Hydrangea Arborescens (Hills of Snow Hydrangea), Cornus siberia alba (Red Osier Dogwood), Cornus stolonifera

A GOOD SHRUB FOR BACKGROUND

Nannyberry (Viburnum Lentago) is a tall-growing shrub which is splendid for use as a background for lower shrubs and flowers.

var. flaviramea (Golden Twig Dogwood), Physocarpus opulifolius (Common Ninebark), Viburnum dontatum (Arrowwood); Rhus laciniata (Cutleaf Sumac), Lonicera tatarica rubens (red honeysuckle).

Trees: Same as listed for Pierce County.

Perennials, Same as listed for Pierce County.

Descriptions of these shrubs, particularly with respect to height, color of blossom, time of blossoming, and the cultural methods to employ have been made out by the Horticultural Department, College of Agriculture, and will be furnished upon request to State Club Department, College of Agriculture, Madison, Wisconsin.

This department is making out, also, some suggestions that will be helpful in planning where to place the shrubs when they are ready to be planted on the school grounds. Circular No. 190, "Planning and Planting the Home Grounds" will be a help in planning the logical placing of shrubs on the home grounds.

The shrubs to start out with are one stemmed plants 6 to 12 inches high and are called, in nursery circles, lining out stock. When nursery men do not start their stock from seed or cuttings, they start the plants which they sell finally for lawns, just as is recommended here—from lining out stock. Each plant costs all the way from two to six cents apiece. The maximum cost of getting these plants would be about one dollar per pupil. With good care the plants should be ready to take home at the time the sixth graders finish the eighth grade.

A special part of the Arbor Day program could be a plant distribution and planting day at which time the plants belonging to the members of the finishing class are lifted, some planted on the school grounds and the rest taken home and planted according to approved plans. It is clear that, at the start of the school nursery, the eighth grade members had better take their lining out stock home and establish a home nursery.

The school nursery must be properly cultivated (which means timely cultivation); and watered during the dry summer periods. The older boys of the school could be organized for this purpose. Often these boys belong to the Junior Forest Rangers of Wisconsin, and it is their duty to help out in this kind of work whenever the opportunity presents itself.

The Home Project

This differs from the school project in that the work is carried on by the individual at home, and involves a larger area and more plants than is allotted to each in the school nursery. The minimum space in the home nursery is placed at 100 square feet, and the number of transplants at 100, including some perennial flowering plants. The same shrubs recommended for the school nursery are recommended for this project and in addition some of the native Evergreens.

Detailed cultural directions will be furnished to all individuals undertaking this work. Those carrying on the home nursery project may enroll as regular 4-H club members. Boys carrying on the Junior Forest Ranger program will find it profitable to grow native evergreens from seed which they collect or which can be secured for them. Evergreens in the school and home nursery are highly desirable but are of slow growth and somewhat more difficult to grow.

An editor received this letter: "Dear Editor—I am in love with a homely girl, but she doesn't seem to care for me, while a pretty girl with a fortune wants to marry me. What shall I do?"

This was his answer: "Marry the one you love—and send us the name and address of the other one."

NORTH DAKOTA NOTES

A. F. YEAGER
Sec. N. D. Horticulture Society

For anyone who has not much money to spend but still wishes to get some of the finest Glads, we suggest the following list which covers the field of color quite well: Carmen Sylvia, Golden Measure, Ming Toy, Jenny Lind, Le Marshall Foch, Evelyn Kirtland, E. J. Shaylor, Giant Nymph, Mrs. Dr. Norton, Bengal Tiger, Herada, Scarlet Wonder, Rosh Ash, Purple Glory.

In some extensive experiments in California for the control of mice, rolled barley was found to be the best carrier for the poison. Experiments indicate that one ounce of strychnine to thirty quarts of barley gives first class results.

Several letters have come which ask about the planting of pine cones. A pine or spruce cone is not a seed but is merely the receptacle for the seed. The true seeds are very small and are winged. They are produced between the scales of the cone. The growing of evergreens from seed is likely to result in failure for most inexperienced people. It is much better to leave this to the trained nurseryman and to buy the young seedlings.

In the (English) Gardeners Chronicle, the coating with paraffin wax is mentioned as a means of causing newly set trees to grow. The paraffin wax has the effect of preventing drying out.

We are asked whether it is possible to move a box elder 5 inches in diameter. Yet it is, if you take as much root as possible with the plant and cut the top back very severely, leaving little more than a bare pole. Transplanting should be done as soon as the ground will permit in the spring.

Growing Red Raspberries

W. H. ALDERMAN
Chief, Division of Horticulture,
University of Minnesota

THERE are two quite distinct systems of culture of red raspberries practiced in Minnesota. These are the staked hill system and the hedge row system.

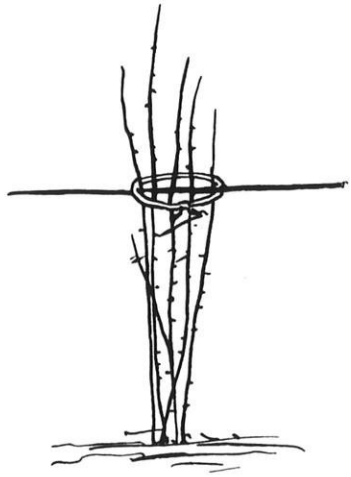
The staked hill planting is practiced almost universally in the Hopkins district west of Minneapolis. The plants are put out either 6 by 4 feet apart and are kept in definite hill form, usually trained about five canes to the hill and these tied to a stake standing about four feet out of the ground. Tamarack stakes are commonly used about an inch and a half in diameter. The plants are held to the stake with two ties, one about half way up and the other near the top of the stake.

In the hedge row planting the rows are planted six feet apart and a solid hedge allowed to develop. *The common tendency is to allow these hedge rows to become thick and too wide for best results.* The better growers keep the hedge row as narrow as possible and keep the canes thin in the row.

Staked Hill System Gaining Favor

The staked hill system of handling is slowly gaining in favor and each year is being adopted by a few growers in the Minnetonka section. This system is somewhat more expensive to install since it involves the cost of procuring and driving stakes and the tying of the canes to the stake. There is a definite saving of expense, however, in cultivation and the elimination of hand labor. The plants are commonly cultivated both ways until the fruit is ready for harvest. At ripening time, in order to avoid knocking off berries, cultivation is maintained only one way through the wide rows.

This paper on raspberry culture was presented at the annual convention. Some of the important problems of our growers on planting systems and distances, when and how to prune, fertilization and disease control are discussed.



Harvesting operations are easier and the picking more rapid in the case of the staked hill than in the hedge row. There seems to be no question but what a better quality of fruit is secured on the staked hill plan. There is a difference of opinion as to the yield of fruits, advocates of both systems claiming superiority for their plan. Unfortunately, there are no carefully controlled experiments showing the comparative yield in our state.

It is my belief that the staked hill system will at least yield as much as the average hedge row and that the fruit will be of bet- quality.

When it comes to the elimination of mosaic, the hill system has distinct advantages. It is much easier to eliminate all the plants, including suckers, when a mosaic hill is found than to make a clean job when mosaic is found in hedge planting. It is the opinion of most of our planters also that mosaic spreads less rapidly in the hill system plantation than in the hedge row plantation.

When to Prune

Several problems in connection with pruning have arisen in Minnesota in the past few years. One question concerns the time of the removal of the old fruiting canes. The question arose whether these should be removed immediately after bearing or whether they should be allowed to die and be taken out at any convenient time during the fall, winter or spring.

It has been suggested that these canes might function as living plants for a month or more after fruiting and aid the crown in storing up more plant food materials for the following year. This was assuming that the leaves of the fruiting canes would continue to manufacture food for the plant and that these stored foods would be withdrawn from the old canes and either used or stored in the crown or in the younger canes.

To determine whether there was anything to this theory, careful chemical analyses were made of the old fruiting canes immediately after harvest and again at about the time they withered and died in late September. It was found that there was no withdrawal of food material from these canes to the rest of the plant and that, when the cane dies, it still holds within its tissues the stored up food materials that were made available by its leaves.

Hence, there is no reason for leaving these canes after they have fulfilled their fruiting function. In fact, they simply

act as an added drain on the fruiting system for moisture and raw food material and serve as a harbor for infectious plant diseases. Unquestionably, then, the *sooner they are removed from the patch, the better it will be for the berry plants.*

When to Head Back

The second problem in connection with pruning has dealt with the time of heading back of the young shoots,—whether this might be done in the fall or should be delayed until spring. Although the matter has not been carefully checked experimentally, there is considerable evidence to indicate that there is much greater danger of winter injury following heading back in the fall than would be the case if no heading back took place. The cutting or injuring of a cane evidently stimulates, or at least allows increased oxidation to take place and winter injury usually follows.

The height of pruning has been a matter of considerable discussion. It has been the usual practice to prune the hedge rows at about waist height, or in other words to prune them at such a height that the canes could still stand and carry a crop of fruit. There were some who advocated lower pruning and others who felt that the heading back should be just as little as could be practiced and still maintain an upright cane. In the case of the staked hill growers, they have followed the practice of heading their plants at about five feet.

Low Heading Reduces Yield

In an experiment to determine the best height for heading back, it has been pretty well determined that *extermely low heading, such as 18 inches to two feet, will enormously reduce the crop and will result in the production of late berries.* Such plants will usually ripen their fruit about two weeks later than in normal plants.

In general there has been increase in production comparable to the length of cane which was allowed to remain. Five feet canes have yielded better than three feet canes. However, such a height is not feasible in the hedge row system unless some form of trellis is adopted to maintain erect canes.

There is usually some winter injury to the buds towards the top of the cane and in practice the pruning should be more or less regulated by the amount of winter injury. If one will cut longitudinally through a bud and cane in the spring, it will be noticed that there will be a brown area at the base of the bud if winter injury has taken place. The depth of color in this area and the extent of the browning indicate the extent of the winter injury. If the color is dark brown and covers a considerable area, it is quite likely that the bud has been so badly injured that it will not send out a growth. In cases of a lesser injury, a normal growth may be made but the point of attachment will have become weakened because of the winter injury and the lateral will break off under stress of wind or load of fruit, such broken laterals, of course, reducing the bearing capacity of the plant. It is advisable, then, to cut away the worst injured wood.

An examination in the spring before heading back will aid one in determining the height of heading.

If there is no serious winter-injury, the greatest crop will probably be secured by heading in the neighborhood of four and a half or five feet. If there is considerable injury to the upper bud in this length of cane, the yield will probably be somewhat increased by heading just below the worst part of the winter injury. During the past season, we headed canes at three feet and at five feet. As it turned out, we would doubtless have increased our crop yield had we headed the plants at four feet or four and a half since a large number of the upper laterals were broken down before fruiting.

Heavy Fertilization Gives Results

The raspberry requires rather intense culture, and will most assuredly respond to high cultivation and will certainly react unfavorably to the presence of weeds or grass prior to fruiting time.

It is a gross feeder and will take up and utilize a large amount of plant food. I question if it is possible to over-fertilize a raspberry plantation, even with the application of nitrogen fertilizers. We have an instance in Minnesota where a man used 200 good-sized loads of manure per acre in his raspberry patch one season and he reports that he produced the best crop of raspberries he ever harvested.

There has been very little experimental work dealing with the fertilizer requirements of the red raspberry. If one were to make a guess as to the best kind of fertilizer to apply, he would probably recommend liberal applications of nitrate and phosphate. It is questionable if potash would be of much value unless you were dealing with a light, sandy soil or with one that had been shown to be lacking in potash salts.

Mosaic, Mildew, and Cane Blight

Undoubtedly the most serious disease of the red raspberry in Minnesota is the mosaic. The seriousness of the situation, however, stimulated an intensive effort to bring the disease under control. The efforts of growers, nurserymen, and nursery inspectors along this line have been surprisingly successful.

No raspberry stock may be sold in Minnesota unless it has been inspected at least twice by the State Inspector and is

(Continued on page 184)

Rock Garden Plants from Seed

MRS. A. JAEGER

THERE are hundreds of interesting and beautiful rock plants and many may be easily raised from seeds. Why grow rock plants from seed?

First, that is the cheapest way to have a large variety of plants. Second, it is the only way to get those rare plants which we can not buy in this country. Third, because it is so very fascinating to grow rock shrubs, bulbs and plants from seed.

We cannot obtain all varieties of seeds of rock plants in this country, so, if we want a rare variety we have to send to Europe.

I will give you the name of two nurseries of whom I have bought seeds for a number of years and have been well pleased.

Thompson & Morgan—Ipswich, England.
Floraire Nurseries—Chene-Bourg near Geneva, Switzerland.

Of course all seeds never germinate but we always get enough interesting sprouts to make us forget about those which did not grow.

The Alpine Poppies

Some of the first rock plants I grew from seeds are the Alpine Poppies. I mix seeds of these, which are very fine like all poppy seeds, with sand and sprinkle them over the bare spots in the rockery very early in the year, in January or very early in February. It is very important that they be put out early or they will not sprout. This summer I had fine Alpine poppies and one flower measured as much in diameter as the whole plant. I had all colors and the petals were as thin as tissue paper and some beautifully fringed. They are carried on stems three or four inches in height and are perfectly hardy without protection.

This paper on Rock Plants was presented by Mrs. A. Jaeger before the garden club section at the convention.

New and rare varieties may be grown from seed. Our rock garden enthusiasts will find much of interest in Mrs. Jaeger's suggestions.

Alpine Geraniums

The Alpine geraniums are very rare in this country but are easily raised from seed. I start mine in a flower pot in a sunny window in January or February. Most of them sprout in a week or ten days and then are ready to be planted in the rock garden the beginning of May. Last spring I grew four different species from seed and I believe these four are some of the best for the rockery. Geranium cinereum is about three inches in heighth. Its leaves are grey and it has pale pink, beautifully veined flowers. Geranium argenteum is lower and its leaves are quite silvery and it has beautiful large flowers the color of a wild rose.

Both of these plants grow wild in the mountains of Spain.

It may not be of interest to some gardeners to know what countries their plants come from. But when I stand in my little rock garden and look at some of my treasures and remember that they have come to me from the ends of the earth and now are gathered together in this small space it certainly is more interesting.

The third geranium is Geranium sanguineum lancastriense. This is a large name for a little plant because it is even lower than argenteum, in fact, fairly hugs the ground. Its leaves and stems are hairy and it has pink flowers veined darker. This grows wild in only one spot in the world, a small island off the west coast of England. Geranium Wallichianum has lavender flowers and is of trailing habit. All these are perfectly hardy.

The Erodiums, which are related to the geraniums are also rare and of some the seeds also seem to be rare. I had three seeds of Erodium Chrysanthum this spring and was fortunate enough to have two sprout which are now fine plants with silvery very finely cut leaves. The flowers are yellow. All Erodiums have fine ferny leaves. I do not know how to describe their flowers. If I could reduce an orchid to half an inch it would resemble an Erodium. Although small the flowers are beautifully marked and blotched.

The Wild Pinks

The wild pinks or dianthus come easy from seed. Dianthus deltoides can be bought almost anywhere, either seeds or plants. But I like it because the foliage is evergreen and it makes a nice ground cover for small bulbs. It is also useful in between stepping stones. The flowers are cerise.

The Cheddar Pink (Dianthus Caesius) grows wild on the Cheddar cliffs of England. It has grey foliage and very fragrant pink flowers.

The sand pink (Dianthus arenarius) is also fragrant but has white fringed flowers.

Dianthus atrorubens has stems about a foot in length At the top is a cluster of bright red flowers on the order of a Sweet

William. It is very effective against a large rock. There are many other dianthus which may easily be raised from seed. The seeds are best started right in the rock garden or a seed bed.

There are also many Campanulas to try from seed. This year I was fortunate to get a number of seedlings of a rare yellow one, Campanula lanata. Seeds of this were pressed right into the soil of my rockwall.

Of the Columbines I have raised from seed, I like Aquilegia flabellata, the Japanese Columbine, best. The leaves are grey and waxy and the flowers are waxy and cream colored. It blooms before other Columbines.

The Thymes would be worth growing if they did not have any flowers because their foliage is very fragrant. Some nestle close to the ground and these are nice in between stepping stones. Others grow like small shrubs.

I am quite partial to Violas. The old fashioned Johnny-Jump-Up is welcome in the rock garden and any other part of my garden.

From England I had seed of Bowls' Black, a very dark one with a yellow eye. Viola Florairiencis is larger. It blooms very early in spring, late in fall, and most of the summer. There are many other Viola species to try among them, some that are pink or yellow. They are best started in the fall.

Iris species for the rock garden are very interesting seedlings. I have raised Iris tricuspsis and it bloomed the third year from seed. This spring I raised one fine plant of Iris flavissima and this is worth having. It blooms very early and its flowers are lemon yellow and vanilla scented. The Floraire Nursery offers a large variety of Iris seeds.

For the Rock Garden in Shade

I wish to mention a few plants which I have grown from seed that are suitable for a rock garden in the shade.

A nice plant of Allium moly resembles a rock garden Yucca. Its flowers are yellow and it is a native of Spain. Corydalis Lutea is pretty for any shady corner with its ferny leaves and yellow flowers but is especially nice near the pool. It blooms most of the summer.

Kenilworth Ivy (Linaria Cymbalaria) clings to stone and is very pretty with its ivy shaped leaves and lavender blossoms. It is not always hardy but there usually are enough selfsown seedlings to make up for the loss.

Writing of this Linaria makes me think of another, Linaria reticulata aurea purpurea. This is very attractive. The flowers are shaped like a small snapdragon, wine colored with an orange spot. This is a low annual.

Calceolaria mexicana is also an annual.

Most of you are familiar with the florists calceolarias. This is a smaller edition with citron yellow flowers. It usually selfsows.

Androsace lactiflora is a biennial. Its rosettes are no larger than a quarter. The second spring it throws up a stem of three or four inches on which is carried a regular umbrella of blossoms. The spray of blossoms is many times larger than the rosette of leaves.

Shrubs

I am just beginning to grow all kinds of shrubs from seed but I want to describe one which is small enough for rock gardens. This is Dorycnium hirsutum, a member of the broom family. Mr. Wilson writes in his new book "More Aristocrats of the Garden" that Dorycnium hirsutum has been found perfectly hardy in the Arnold Arboretum. This is good news because I have several nice shrubs. The leaves are grey and hairy and the branches lay flat on the ground and spread out in all directions. The flowers are to be pink and white. There are quite a few shrubs for the rock garden one may try from seed. There ars shrubby Veronicas and Penstemons, Genistas and Cytisus and Willows which only grow a few inches in heighth and bear large catkins.

I'm sure I shall never tire of this sport of raising plants from seeds and I hope I have interested you enough so that you will also want to grow "Rock Plants from Seed."

We specialize in Regal Lilies

Wholesale and Retail

H. C. Christensen
1625 Ninth St.
Oshkosh, Wis.

KINKADE GARDEN TRACTOR
and Power Lawnmower
A Practical Proven Power Cultivator for Gardeners, Suburbanites, Truckers, Florists, Nurserymen, Fruit Growers, Country Estates and Poultrymen.

Catalog Free
AMERICAN FARM MACHINE CO.
1085-33rd Ave. S. E. MINNEAPOLIS, MINN.

HARDY FRUITS FLOWERS
And ORNAMENTALS
At Right Prices They Grow and Please
Landscape Suggestions and Catalog on Request
STRAND'S NURSERY
Box 23. TAYLORS FALLS, MINN.

Let us supply the material to make your home a beauty spot.
We have a complete line of trees, plants, and shrubs for the garden, lawn and orchard.
THE COE, CONVERSE & EDWARDS CO.
FORT ATKINSON, WISCONSIN

What Varieties of Apples Shall We Grow

Prominent Growers Give Their Opinion on the Duchess and Wealthy

THE fruit crop of the United States is worth a billion dollars according to W. H. Alderman in his article "Our Changing Horticulture" which appeared in the January issue.

Few of us realize that we pay more for our fruit than for our daily bread. The national fruit crop has a greater value than the wheat crop.

When Ford found his old model car would no longer meet competition, he scraped it and built an entirely new model at a cost of millions of dollars.

Years ago fruit growers planted the best varieties they knew about, many times twenty-five or more varieties in one orchard.

Other orchards, planted more recently, are of better varieties. The old, inferior kinds won't compete with them on the market.

Will the fruit growers have the nerve to do what Ford did?

We have heard commission men complain about the quality of Wisconsin apples. They don't want poor fruit.

We are in an area of low production and the nation's best markets. We continue to let outside fruit take the cream of our markets, and complain about low prices and over production.

McIntosh Clubs

Mr. Fred Sacia of Galesville, a commercial apple grower has a good suggestion:

I am one of those who believe there should be no further expansion of commercial apple growing in Wisconsin unless, perhaps, the encouraging of small growers of a special variety.

The variety I have in mind is the McIntosh which grows to perfection in Wisconsin for the same reason Spitzenberg did for a certain old man in the west. A visitor was commending this old man for raising such nice Spitzenbergs. His reply was. "Can't help it, this is Spitzenberg land."

If you follow the apple markets, you have noticed that McIntosh tops the market at about twelve dollars per barrel. An apple survey shows that this variety is planted heavily but it does not necessarily follow that they will all come onto the market. Due to the fact that the harvest season is shortened, the variety needs careful and speedy handling into storage to insure good keeping which makes it a small growers apple rather than the commercial growers.

If the matter is taken into the schools, it is my idea to form McIntosh clubs, the members to plant no more than a hundred Macs with a few fillers for pollenizing. This number in full bearing would produce from five hundred to a thousand bushels. All the family could harvest. The harvest of Macs comes just after the corn harvest, usually. The growing of the one variety instead of dabbling in a number would have many advantages. A club could cooperate all the way from growing to marketing and shipping. The income would come in a lump sum and as this would be wholly a side issue to the regular farming, the family should be encouraged to spend the sum for the little luxuries that bring so much enjoyment around the home.

If the growing of Macs is overdone, so will be the other few good varieties, and anyway the individual loss would be small. We commercial growers sometimes find we have a crop when other sections fail; then we make up for the off years.

The Duchess in Wisconsin

"Should more Duchess be planted in Wisconsin?" was the question asked of a number of our leading apple growers in different sections of the state.

We give their answers here and will take up other varieties of apples in the near future.

Our president, Mr. C. J. Telfer of Green Bay writes in answer to the question as follows:

Duchess should be planted only for home use. It is a very poor seller when shipped, as the southern states supply all that are wanted. A few can always be sold locally if picked early and sold as green apples. The tree is very hardy, one of the hardiest in Wisconsin. It is resistant to blight, and scab can easily be controlled. It yields well and is inclined to yield heavily every other year.

Our vice-president, Mr. Moulton B. Goff of Sturgeon Bay writes as follows:

No more Duchess should be planted unless the "Red Duchess" proves far superior to the old. They mature poorly in many sections, come into bearing late and are not in as active market demand apparently as they were formerly because of increased supplies. Duchess do not sell well for shipment. It yields very young and very well, comparing with the Wealthy in yield, but bears younger. The tree is very hardy and not subject to disease.

Mr. Ed. Carver, Manager of the Bayfield Fruit Association of Bayfield writes as follows:

The Duchess should not be planted in this district. Our Duchess come late and in competition with better keeping apples. The Duchess season is over when our are ready to market; consequently they do not sell well. The tree is hardy

and free from disease in this section. It is one of our best yielders but can't come up to the Wealthy year in and year out.

Mr. Fred Sacia of Galesville writes as follows:

No more Duchess should be planted in Wisconsin because they follow the Michigan and southern Duchess and do not sell well. The tree is one of the hardiest we have and is resistant to blight, scab and other troubles. Mr. Sacia planted 2,000 Duchess but has now top grafted them to other varieties. He thinks it improves the Wealthy to top graft on Duchess and is easily done.

Swartz Brothers of Waukesha, who are large growers, say: More Duchess might be planted near large cities as it will provide a local market. In their section it is hardy and resistant to disease but is quite subject to off year bearing.

Mr. Ralph Irwin of Lancaster says Duchess are no good for Grant County. They are quite hardy and free from disease but bear only every other year.

Mr. E. H. Stoeber, Madison fruit grower, writes: We have enough early apples in Wisconsin. Duchess can't be produced at a profit for 75c to $1.00 per bushel retail. Duchess may sell well early in the season but most of them are sold at little or no profit and they ripen too early to be used to any extent by the housewife. The tree is quite hardy and is resistant to disease. The fruit has a tendency to drop before coloring well. Fruit on the older trees has a tendency to be small, lack quality and color.

Mr. A. K. Bassett of Ski-Hi Farm of Baraboo thinks no more Duchess should be planted as there is not sufficient demand. He says the price is too low and much of the fruit is wasted. The tree is very hardy and free from disease but is a biennial bearer. He thinks it yields too well.

The Northwestern Greening for Wisconsin

The growers were also asked whether more N. W. Greenings should be planted in Wisconsin and as to its hardiness, etc.

Our president Mr. Telfer writes:

I think more Greenings should be planted in Wisconsin. The trees are hardy, good bearers and the apples keep well. It is one of the best cooking apples we have, also good for pies if used after December 15. He states that the Greenings sell well for shipment. The tree is hardy but not as good as the McIntosh or Snow. It does not blight much. The apples will scab but usually it is early infection which is quite easily controlled. It yields well.

Vice-president Goff writes that he thinks more Greenings should be planted in Wisconsin especially in the milder portions of the state. They are proving to be a satsifactory market variety. They sell well at a fair price, not permanently high perhaps, but there is a good demand for a smooth, easily pared apple of large size for pies, baking and cooking.

The opinion of many Door County growers is that the Northwestern Greening is one of their most profitable varieties.

The tree is not as hardy as the Wealthy or Snow. It is resistant to blight, scab and other troubles. It yields well, but is somewhat inclined to biennial bearing.

Mr. Fred Sacia of Galesville gives his opinion that no more Greenings should be planted in Wisconsin, because the demand is growing less and the supply larger. He believes in replacing Greenings in his orchard as fast as the trees die out. He states that the Greenings sell fairly well for shipment but not locally. The tree is fairly hardy but is short lived. It is not entirely resistant to blight or scab. It yields well and is as good as the best in this respect. He has a solid block of Northwestern Greenings, ten acres, twenty-four years old. Nineteen carloads from this orchard was his best crop. Evidently Mr. Sacia has had some experience.

Mr. Ed. Carver, Manager of the Bayfield Fruit Association states that in his section no more Greenings should be planted. It is getting harder to sell Greenings every year because few people want anything but a red apple. He states that the Greening is hardy in his section and is as resistant to disease as any other and yields quite well.

Swartz Brothers of Waukesha say that more Greenings could be planted as it is one of the best winter varieties we have. There is a good call for them in hospitals and sanitariums. They make clear white sauce and have no equal for this purpose. The tree is hardy but subject to bad angles or crochety limbs that break down easily and are somewhat subject to blight and scab. They are an extra good bearer.

Mr. Irwin of Lancaster says that the Northwestern Greening sells well both locally and for shipment in his section. It is absolutely hardy but scabs badly and is subject to splitting in the crotches if they are not braced. It is one of the best yielders of any variety he has.

Mr. Stoeber of Madison thinks that more Greenings can be planted in Wisconsin. They are a good cooking apple when held until the first of the year. They are good yielder, free from disease, the fruit hangs well to the tree and the fruit keeps well.

He says that Greening apples do well if they have color and size and are free from blemish. They stand handling well but will deteriorate if damaged. He says the tree is quite hardy but has a tendency to crotch badly. It is not as hardy as the Snow, however. In his location it out-

yields any other variety over a period of twenty years and is almost an annual bearer, when kept pruned so fruit has good size.

Mr. A. K. Bassett, Ski-Hi Farm, Baraboo, thinks that no more Greenings should be planted as there are too many now.

What Varieties to Plant in Wisconsin

The question was asked each grower, "If you were planting ten acres of apples, what varieties would you plant?"

Mr. Telfer gives the following list: McIntosh, Snow, Wealthy, Northwestern Greening, Dudley and a few Delicious.

Mr. Goff recommends McIntosh, Wealthy, Greening and possibly Tolman Sweet.

Mr. Sacia writes, "Queer, but the old commercial grower is never quite decided what to plant."

Mr. Carver of Bayfield says, "In this district I would recommend all Wealthy."

Swartz Brothers recommend Wealthy, Snow, McIntosh, Wolfs, Northwestern Greening and Tolman Sweet.

Ralph Irwin says he would plant 4 acres of Greenings, 5 acres of McIntosh and one of another variety for local market.

Mr. Ed Stoeber of Madison says that if he were planting ten acres of orchard to be shipped he would plant six acres of McIntosh, two acres of Wealthy and two acres of Northwestern Greening. But if he were going to sell to local stores near a good market he would plant Duchess, Wealthy, McIntosh, Snow, Delicious, Tolman Sweet, Northwestern Greening and Wolf River.

Mr. Bassett of Baraboo gives the following as his choice in planting a ten acre orchard for commercial purposes: Five acres of Snow, one acre of McIntosh, one acre of Delicious, two acres of Salome or Windsor, one-half acre Northwestern Greening, one-half acre Wolf River.

BEST VARIETIES OF VEGETABLES FOR WISCONSIN

COMMITTEE

H. C. Christensen, Oshkosh, Wis., Chairman.
James Livingstone, Milwaukee, Wis.
W. E. Spreiter, La Crosse, Wis.
John Budzien, West Allis, Wis.
Professor J. G. Moore, ex-officio member of all committees.

1. Artichoke—x.
2. Asparagus—1. Mary Washington; 2. Palmetto.
3. Beans—1. Green, Longfellow; 2. Early Green Pod; 3. Giant Stringless Wax; 1. Unrivalled; 2. Pencil Pod Black Wax; 3. Curries Rust Proof; 4. Hodson.
4. Beets—1. Crosby's Egyptian; 2. Early Model; Late, 1. Detroit dark red.
5. Broccoli—1. Green Sprouting.
6. Brussles Sprouts—1. Long Island Improved.
7. Cabbage—Early, 1. Golden Acre; Mid-season, 1. Succession; 2. Allhead; Late, 1. Danish Ballhead or Hollander.
8. Chinese Cabbage—1. Pe Tsai; 2. Special Tall; 3. Wong Bok.
9. Carrots—1. Chantenay; 2. Danvers Halflong; 3. Nantes or Corless.
10. Cauliflower—1. Early Snowfall; 2. Erfurt.
11. Celeriac—1. Large Smooth Prague.
12. Celery—1. Golden Plume; 2. Golden Self Blanching.
13. Chicory—1. Whitloof.
14. Chives.
15. Corn—Sweet 1. Golden Bantam; 2. Stowell Evergreen. (Extra Early); 1. Sunshine.
16. Cress.
17. Cucumbers—1. White Spine; (Slicing) Davis Perfect; (Ripe) Long Green; (Pickling) Chicago Pickle.
18. Eggplant—1. Black Beauty.
19. Endive—1. Green Curled.
20. Horse-radish.
21. Kale—1. Dwarf Green Curled.
22. Kohlrabi—1. White Vienna; 2. Purple Vienna.
23. Leeks—1. Large American Flag.
24. Lettuce—Leaf, Grand Rapids; Head, (Early) May King; 2. Big Boston; (Muck soil) Unrivalled or Green Leaf Big Boston; 2. New York or Los Angeles (called "Iceberg" on the market).
25. Martynia—x.
26. Muskmelon—1. Milwaukee Market; 2. Hearts of Gold; 3. Osage.
27. Mustard.
28. Okra.
29. Onions—1. Yellow Danvers; 2. SSouthport Red Globe; 3. Mountain Danvers (early); 4. Southport White or Yellow Globe.
30. Parsley—1. Moss Curled.
31. Parsnips—1. Hollow Crown; 2. Guernsey.
32. Peas—1. Little Marvel; 2. Laxton's Progress; 3. Stratagem.
33. Pepers—1. Harris's Early; 2. Oshkosh; 3. California Wonder.
34. Pumpkins—1. Small Sugar.
35. Radishes—1. Early Scarlet Globe; 2. White Icicle; 3. Scarlet Turnip.
36. Rhubarb—1. Wyatt's Linnaeus.
37. Rutabagas—1. American Purple Top; 2. Improved Long Island.
38. Salsify—1. Sandwich Island.
39. Spinach—1. Bloomsdale Savoy; 2. King of Denmark; 3. Juliana; (For Home Garden) New Zeland.
40. Squashes—1. Table Green; 2. Hubbard; 3. Kitchenette.
41. Swiss Chard—1. Luculus.
42. Tomatoes—1. Bonny Best; 2. John Baer; 3. Marglobe.
43. Turnips—1. White Globe.
44. Watermelon—1. Coles Early; 2. Keckley Sweet; 3. Harris's Earliest.

The above list is a compilation of the recommendations of the members of the committee and several other growers.

IRIS 55 Plants about as follows: 10 White and Lavender, 10 beautiful Purple, 10 Snow White and fragrant as Hyacinths, 10 Bronze and Gold, 10 Lovely Sky Blue. Also five 50c plants of my favorite of all Irises. *All labeled, all beautiful, about* $12 *worth, parcel post prepaid, for only* $3. Full instructions. Planted in Feb., Mar. and April should bloom in May. *Two exquisite Cream and Lavender plants free for prompt orders.* Will ship when frost is out.
Otwell Iris Fields, Carlinville, Illinois

OLDS' Seeds
Known for Reliability
We specialize in **Field Seeds.** Our Seeds are standards for purity, hardiness and adaptability. **Clover Seed.** Domestic crop (the only kind to sow) is short. Buy early. Prices will advance. **Grimm Alfalfa.** Hardiest, Blackfoot and Montana. **Common Alfalfa.** Montana grown. Order early. **Sweet Clover.** Immense stock White and Grundy. **Alsike.** Good seed scarce. Buy now. Ask for **Samples Above 5,** showing tests. Sent free of charge.

OLDS' 42nd CATALOG
Now ready, 96 pages. *Pedigreed Seed Grain, Field and Garden Seeds* all kinds. *Seed Potatoes, Bulbs, Tools, Supplies.* Send postal today.
L. L. OLDS SEED COMPANY
Drawer 6 Madison, Wis.

Other Ways to Serve Vegetables

BERNICE DODGE
Home Economics Department,
University of Wisconsin

WE HEAR a great deal these days about the value of vegetables in the diet; we know that they are needed for their minerals, for their vitamins, and for the bulk or roughage which they provide so plentifully. But how to get the family to eat enough vegetables, when one of them wont' eat spinach and another doesn't like carrots, is often a real problem.

Of course they say that a properly brought up family will like all vegetables; that may be true, but it may not mean that they will like all vegetables cooked the same way. A change of seasoning, a change in appearance, or a change in texture may make it possible to add a previously unpopular vegetable to the list of those the family likes.

Spinach probably heads the list of the very valuable vegetables, often disliked. So we hesitate to serve it in the Practice Tea Room, which our students manage each Spring, for fear our patrons would not come again if they were served food they did not like. But we had a way of preparing spinach which seemed so good to us that we dared to try it—and it has become one of our most popular dishes, one that people ask for. Many people have said that they never ate spinach anywhere else, but they really liked ours. In cooking this way, both the flavor and appearance are changed.

New Way for Spinach

Heat the spinach first, either canned or fresh spinach. Make a stiff white sauce, using 4 Tb. of flour to a cup of milk. Season it well with salt and pepper, and add grated cheese, stirring it until it melts in the sauce. Have ready some hot buttered crumbs. At the last minute, when you are all ready to serve

the meal, drain the spinach and fold it gently into the sauce, so that it does not color it green, and then put a generous sprinkling of the brown crumbs on top. For a large can of spinach, you will need about a pint of white sauce. The amount of cheese used will depend upon how strongly flavored it is, and upon how well the family likes cheese. This is called spinach au gratin —and I recommend it to you.

If you have never eaten raw spinach salad, you have a surprise ahead. Choose the small tender leaves, garnish with pimento, and serve with French dressing. It will remind you a bit of water-cress.

For our Tea Room we also make a salad of raw carrots which makes a good dessert. To a pint of lemon gelatin, add a cup of grated raw carrots and a cup of crushed pineapple. It is always safer to bring the pineapple to the boiling point before adding it to gelatin, as you probably know, raw pineapple contains an enzyme which keeps the gelatin from getting stiff, and some traces of it may be present even in canned pineapple.

A New Vegetable Stew

There is a vegetable stew which is particularly appetizing, and which can be recommended as good for anybody over two years old! It is a combination of vegetables, cut in small pieces, first browned in bacon fat and then stewed gently in water enough to cover them, for about an hour. Let the water cook away, so that when it is served, it is a thick stew, not a soup. Add to the vegetables a little ground raw beef — about a quarter of a pound is enough meat for a stew to serve six people. Be sure to use onions and celery, for flavor, and carrots for color; then add any other vegetable you may have, turnips, or cabbage, or spinach cut fine, or a few left-over string beans or peas, or a little canned tomato, or green peppers, or a little potato.

Let the appetizing odor of this stew meet the family as they come home for dinner some snappy cold day—I'm quite sure there will be no stew left over.

Cabbage is cheap, and a most valuable food, but we tire of it if we have the same way all the time. Try mixing with the chopped cabbage a little pineapple, and marshmallows cut in quarters. It changes it remarkably.

Some cold blizzardy night try stuffed onions. Boil large onions about ten minutes, take out the hearts, and chop them up, adding ground up ham; or if you like cheese better, add grated cheese and bread crumbs: Stuff the onions with this, cover with buttered crumbs, and bake slowly, in a pan with a little water in.

I ate potatoes fixed an entirely new way the other day—and I'd like to try it for a luncheon dish. The potatoes had been baked, and the centers removed and mashed, and then ground ham and green peppers added; the half skins were stuffed, and browned in the oven.

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S.H.S., Madison, Wis.

Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

OUR COVER PICTURE

The interesting scene on our cover this month is from a picture loaned to us by the Wisconsin Farmer, Madison, Wis.

You will be interested in our article "Other Ways to Serve Vegetables" by Miss Dodd. It is sometimes a problem to get some members of the family to eat vegetables we know they should have. We also know now that a meal consisting of pork, baked beans, and potatoes may be very substantial, but there are many vegetables that are more healthful.

If you insist on letting money talk it will usually say "goodbye."

SAVE YOUR COPIES OF WISCONSIN HORTICULTURE

All of the principal papers presented at the annual convention of the Horticultural Society held in December will be published in Wisconsin Horticulture beginning with the January issue and continuing until probably April or May.

The Executive Committee voted to dispense with the annual report this year on account of the expense. It would cost over $1,000.00 to get out an annual report for each one of our members. Since the papers will be published in the magazine each member will have the opportunity of reading them.

We suggest that you save your copies of Wisconsin Horticulture and have them bound.

The Executive Committee felt that the money saved in this way could better be expended in holding more meetings on horticulture topics throughout the state. This seems like a wise decision. It will also enable us to keep up a good magazine.

Mr. J. T. Fitchett of the Fitchett Dahlia Gardens, Janesville, writes us as follows:

"Being convinced that the Wisconsin State Horticultural Society is a worth while institution, have taken the liberty of recommending it in our new catalog, copy of which will be mailed soon."

A good suggestion.

The Pierce County Horticultural Society is making a determined effort to put on a "Better Homes Contest". The County Board as yet doesn't see fit to give them any money for premiums. Some day public sentiment will change that.

The century plant does not bloom once every hundred years as is commonly supposed, according to experts, but blooms at varying periods and then dies. It is a native of Mexico and a member of the Amaryllis family.

PLANT PREMIUMS

ANY new or old member sending in membership fee between January 1st and April 1st is entitled to a selection of one of our plant premiums advertised in the January and also this issue.

If you have sent in your membership fee since Jaunary 1st and failed to make a selection of plant premiums, do so at once. Give second and third choice as we no doubt will run out of certain varieties in a short time.

You can render the society a favor by telling your friends about this offer, or sending us their names so we can send them the magazine.

Mr. W. A. Toole, Garry-Nee-Dule, Baraboo, states: "Our ad in Wisconsin Horticulture brings very good results. We have received as high as four inquiries in one day from our ad."

We are glad to hear this. Our readers will do well to write to our advertisers, as we know them all to be reliable.

Rats, fed a ration lacking in vitamine A, invariably contract colds, sinus trouble and pneumonia. It follows that a ration containing vitamine A builds up a resistance to these troubles. Beans, cabbage, carrots, chard, lettuce, spinach, squash, and tomatoes all carry vitamine A. In fact, it is found in almost all of the green leafy vegetables.

Pigweed seed may remain in the soil for forty years and still germinate when brought to the surface. One plant may produce a million seeds. It won't pay to bury weed seed, much less to allow a weed to mature.

Today is the tomorrow you worried about yesterday. Why worry?

SPRAY CHARTS SENT FREE

WE ARE having a new issue of the "Wisconsin Farm Orchard Spray Program" printed this month.

These charts were sent out as a supplement to Wisconsin Horticulture in March last year to all of our members. The chart consists of five illustrations in three colors, giving the different stages of development of the apple bud and blossom at which time the trees should be sprayed.

Opposite each illustration are directions giving the kind of mixture to be used, the insect and disease controlled and also remarks.

A copy of this chart will be sent to our members free on request. We will not send them to all members again this year because they were sent to each member last year.

We will furnish as high as ten copies free to Agricultural teachers for school work or will sell them at the rate of 75c per hundred.

If you want a copy, drop us a postcard and we will send one to you.

The Department of Agriculture says that Alaska's Forests can yield one million five hundred thousand cords of pulp wood every year forever. This is enough for one million tons of news print paper. Vast forests of pulp wood in the Longash national forests are to be managed by the government for a never ending production of timber.

With tide water transportation and plenty of water power in Alaska this country need not depend upon Canada for news print paper.

Mr. E. L. Chambers, State Entomologist, says: "Dry Lime Sulphur should only be used when the liquid form is not available since it is not as efficient either as an insecticide or a fungicide, and the cost is greater."

The McIntosh apple is a good seller on the New York market. According to the Federal market report recently, New York City prices on bushel baskets of the important varieties was as follows:

New York McIntosh	$2.75–$3.25
New York R. I. Greenings	1.50– 1.75
New York Baldwin	1.50– 1.75

Wisconsin is the second largest cabbage shipping state in the Union. The total number of carloads shipped from the state last year was 4,547. New York leads the nation in production of cabbage.

In 1928 Wisconsin had 101,000 acres of green peas for canning purposes, which is almost one-half the nation's production. New York had the second largest acreage with 31,000 acres.

Strawberries are an important crop in Wisconsin. In 1928 there were 2,840 acres. The yield, however, was small compared to that in 1927, being only three million quarts last year compared to five millions the year before.

Last year Missouri led the nation in strawberry acreage having twenty-six thousand acres.

Mrs. Julia Hahn, West Allis, Wisconsin, in renewing her membership to the Society writes: "If I could have my say, every family would have your magazine added to their library. I don't get out much, but when I am tired of all my housework, and can take up your little paper, I sure do enjoy every item in it."

LIME

WE HAVE seen a number of articles on gardening with statements something like this: "If your soil is sour, lime."

Rather a sweeping statement and one which may readily lead one into trouble.

A recent bulletin from Massachusetts lists vegetables in different groups according to their responsiveness to liming.

In group 1 are crops that are quite responsive to liming, group 2, less responsive, groups 3 and 4 are not particular as to lime requirements and group 5, those which are either injured by liming or will grow in an acid soil.

1	
spinach	leeks
celery	lettuce
asparagus	muskmelon
beets	onions
cauliflower	salsify
2	
cabbage	horse-radish
carrots	parsnips
chard, Swiss	peas
cucumbers	peppers
eggplant	pumpkins
kale	tomato
3	
Brussels sprouts	endive
beans	kohl-rabi
corn	rhubarb
dandelion	
4	
cress	radish
parsley	squash
potato	turnip
5	
blueberries	watermelon
cranberries	strawberries

How to Determine if Lime is Needed

Plants are Natural Indicators. Spinach grows slowly and becomes yellow on acid soil; beets show abnormally red foliage and fail to fill out; celery will not reach its maximum weight for the variety; and the other crops in Group 1 show a lack of vigor when compared with plants on limed areas, other conditions being the same. Clovers, excepting alsike, seldom do well on markedly acid soils, while undesirable grasses and sheep sorrel or "sour weed" tend to replace them on land where acid conditions prevail.

A very easy way, of course, is to send a sample of the soil to the County Agent for testing.

About the Home and Garden

MRS. C. E. STRONG, Editor 80th and George St., West Allis

FOR many years it has been a habit of mine to cut out of newspapers and magazines, bits of verse that appealed to me and tack them up where I could see them.

One of these little poems seems to have a habit of turning up quite often, evidently others like it as I do.

MYSELF

I have to live with myself, and so
I want to be fit for myself to know,
I want to be able, as days go by,
Always to look myself straight in the eye.
I don't want to stand with the setting sun
And hate myself for the things I've done.

I don't want to keep on the closet shelf
A whole lot of secrets about myself;
And fool myself as I come and go,
Into thinking that nobody else will know.
I want to be able to like myself,
I don't want to look at myself and know
That I'm bluster and bluff and empty show.

I never hide myself from me;
I see what others can never see,
I know what others may never know;
I never can fool myself, and so,
Whatever happens I want to be
Self respecting and conscience-free.

—Selected.

JUST ONE THOUGHT FROM THE CONVENTION

THERE were many worth while thoughts to take away from the winter meeting, but Mr. Jensen's talk at the banquet on "Trees, flowers and the memories of his childhood days", was the one particular thing.

Children and gardens are to me inseparable, for with a child's contact with growing things, come many lessons that, once learned, make for happy and useful lives.

The child who has planted a bulb in autumn and waited for spring to see the first green leaves, then the bloom—who has known the delight of sowing seeds—patting the earth down with his little hands—learning to understand the need of caring for the plants, the results of neglect, this child has learned many of those lessons of life that are so needful for him to know.

Patience, observation, the knowledge that it takes labor to acquire possessions, the rights of others, if you wished your rights respected, all these and many others are learned.

There is no better place than a garden to teach a child the infinite wonders of the world, to so fill his thoughts with the beauty that is around him that he may indeed "be young when he is old".

The editor of this page attended three Garden Club Meetings within four weeks, all three Clubs voted to affiliate with the State Federation of Garden Clubs.

One of the Clubs, newly organized in West Allis, "wanted to be sure and get all the help possible", so voted to affiliate with the the State Horticultural Society and the State Federation, agreeing with our Federation President that "all groups united can do many things that one group alone could not do.

Where, OH WHERE, are those enthusiastic gardeners who were going to tell us all about their gardens, and send pictures so we might enjoy them also. We want to know if they were successful, or if they too have troubles. ANY WAY, WE DO WANT TO HEAR FROM THEM.

MY GARDEN BOOK

I WONDER if a few notes from my own 1928 Garden Book would be of interest or help to some other flower lover.

I am quite sure that this book, in which I jot down all sorts of things about plants, seeds, successes and failures, color combinations that have pleased me, has been of much help to me.

January 1st. Planted seeds of Peony Moutan, (Tree Peony from Japan).

March first. ONE lone peony has appeared, seed evidently not very good. Well there is one any way, let's be thankful for that one.

April first. Peony plant growing fine.

May first. Peony plant 2½ inches tall, time to get it hardened a bit, set it on the porch today.

May second. A mouse discovered the peony and ate the roots and half the stem. (I said just exactly what any gardener would say after caring for a little plant for weeks). Do not ask me to repeat it here.

At that I learned something —never set a seed pan on the porch floor in the spring.

A little thing like that does not discourage a real gardener, there are more seeds from Japan in the seed pans, and I am "hoping".

Planted July 19, 1927, 20 Martagon Lily seeds.

March 6, 1928, 14 small plants appeared. Fine, I know just how they will look in the garden in a few years.

July first, funny looking leaves those lilies have.

August first, one actually has a bud, and that looks queer.

September first, those funny looking lilies turned out to be Tigridias.

And the seedsman says "he couldn't help it". No more seeds from him.

(Don't anybody tell me that it would be cheaper to buy bulbs —I know it, but just think of the fun I would miss).

A group of Oriental Poppies are beautiful when in bloom; out of bloom, with yellowing leaves and browning stems, the reverse. Annuals sown in between plants will cover after awhile, but there is an unsightly spot for a time.

June first, I think the problem is solved. A nice large plant of Queen Victoria Peony is partially covering the Poppies. Why not plant a few more white Peonies around the Poppies?

October first, peonies planted. Perhaps next year no one will say, "Poppies are lovely, but— aren't they a real eye-sore in the garden at resting time".

The prettiest "bulb cover" I've ever had.

Balcony Rose Petunias.

Exquisite Pink Larkspur.

Pink Snapdragon (the Rose).

Phlox Drummondi, in pink and rose shades.

Matricaria Snowball, (dwarf Feverfew).

Siberian Wallflower.

Some lavender and white stock flowered Larkspur, and Sweet Alyssum, Tom Thumb.

There was a harmonious blending of colors all summer and fall, doubly satisfactory because one could cut flowers without spoiling the effect.

Tulips and Narcissus are planted in front of Peonies, when the Narcissus bloomed the Wallflowers were a sheet of soft orange, the waxy flowers of the double white Narcissus were beautiful in that setting.

The Larkspur and Alyssum were sown early in the spring, the other plants were taken from the cold frame.

Any combination of colors may be used, but this is my favorite.

Last of June, the east border needs more white to bring out the blue of the Delphiniums, more Daisies, Sweet Rocket, also plenty of white Columbine.

First of August, never will I be happy until there are just dozens and more dozens of rosy pink Violas in my garden, just as they are in Mrs. R's garden at Nashota. Such a happy morning wandering thru her lovely Rock Garden.

When the border was done over, the reminders in the garden book helped.

Also when the seed list was made up, the rosy pink Violas were added.

Truly a garden book helps.

P. S. If you are interested in these notes, tell me. I want to give you on this page the things that help. Perhaps there are some other Garden Books.

Let us hear about them.

Clothier: "Where did you get those fine collection letters? They would get money out of anybody!"

Coal Dealer: "I just adapted the letters my son sent me from college."

Grow Your Own!

What can be more delicious than FRESH FRUIT on the table every day? Our **PLANTERS GUIDE AND CATALOG** tells how you can grow your own and save money.

Send for your copy to-day. Its free.

NORTH STAR NURSERY COMPANY
Box A-56 Pardeeville, Wis.

Farmer Brand Seeds Grow

THERE are new tested varieties listed in our 1929 Catalog which may double and triple your crop income. See this wonderful new book before you buy a seed. 80 big pages, handsomely illustrated, and describing all of our northern-grown, purebred Grains, Seed Corn, Clovers, Alfalfa, Vegetables, Flowers, Berry Bushes and Fruit Trees. Farmer Brand Seeds are guaranteed 99% pure. Remember we sell at low, direct-from-grower prices; a big saving for you! Mail the coupon!

Farmer Seed & Nursery Co.
100 First Ave. Faribault, Minn.

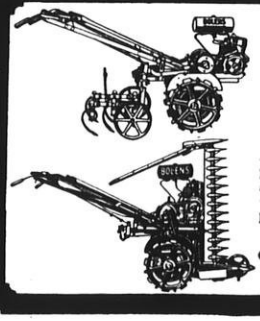
Farmer Seed & Nursery Co.
100 First Ave. Faribault, Minn.

Please send me your free 1929 Seed Catalog. I am interested in:

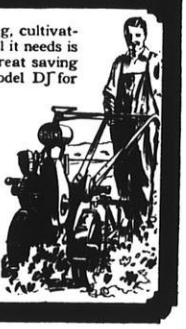
☐ Clovers ☐ Alfalfa ☐ Garden Seeds
☐ Seed Grains ☐ Flower Seeds
☐ Seed Corn ☐ Nursery Stock

Name.....
Town.....
State..... R.F.D.....

BOLENS Tractors for Small Farms and Gardens



MOTORIZE your garden plowing, harrowing, seeding, cultivating, spraying, lawn mowing and field mowing. All it needs is a guiding hand. Gasoline power does the work with great saving in time and energy. BOLENS is built in two sizes, model DJ for gardeners, florists, estates and others—a light machine for extremely accurate work. Model IQ with heavier motor, two speed drive and gear shift—for suburbanites, small farmers, poultry men, bee keepers, nurserymen, etc. All BOLENS tractors have vital and distinctive features—patented high arched axle for clearance and vision, a simple and natural tool control, double clutch drive with power turn, an instant hitch for quick change of implements, off set handles and other advantages. Thousands already in use.



Write today for complete catalog and time payment plan.

GILSON MANUFACTURING CO.
881 PARK ST. PORT WASHINGTON, WIS.

State Garden Club Federation News

MRS. R. L. MALISCH, Hales Corners, President MRS. C. W. VAUGHN, Madison, Vice-president
MRS. A. W. SPERBER, Hales Corners, Sec'y–Treasurer

MEETING OF THE EXECUTIVE COMMITTEE OF THE WISCONSIN FEDERATION OF GARDEN CLUBS

THE meeting was held at the home of Mrs. R. Malisch at Hales Corners, Thursday, January 24, 1929. Those present were Mrs. R. Malisch, president, Mrs. C. W. Vaughn, vice-president, Mrs. Ada Sperber, secretary-treasurer, H. J. Rahmlow, corresponding secretary, Mrs. C. E. Strong.

The meeting was called to order by the president. It was moved and seconded that the corresponding secretary write to the secretaries of all the garden clubs, urging them to join the Federation, and explaining the method of sending in dues. Motion carried.

Discussion followed as to the program of the garden club Federation for the coming summer. A motion was made that the Federation sponsor a state flower show and meeting at some suitable time, preferably in the month of June, time and place to be set later. Also that a meeting in a different section of the state be held some time later in the summer or early fall, but that no flower show be held in connection with it. Invitations as to the place to hold this meeting to be solicited. Motion carried.

It was suggested that as many as possible attend the Chicago Flower Garden Show, to be held at the Hotel Sherman, February 26 to March 3, in order to study the methods employed by the garden clubs of Illinois.

It was agreed to hold the annual convention in early winter in connection with the annual convention of the State Horti-

cultural Society and attempt to put on a very interesting program for garden club members.

Motion was made and seconded that the Garden Club Federation put on a special department in *Wisconsin Horticulture* with the heading "State Garden Club Federation News." Motion carried.

Motion made and seconded that each club be asked to have its secretary, or specially appointed reporter, report news of the club to *Wisconsin Horticulture* each month. Motion carried. It was suggested that this material be sent direct to the State Horticulture Society, Washington Building, Madison, Wisconsin.

The magazine *Wisconsin Horticulture* was designated as the official organ of the Federation, and all official notices will be published therein. No special notices will be mailed directly, therefore, to the members of the Federation.

MRS. A. W. SPERBER,
Secretary.

THE CHICAGO GARDEN FLOWER SHOW

A LETTER from Mrs. Frederick Fischer, Lake Bluff, Illinois, president of the Garden Club of Illinois, invites all the members of this Society to attend the third annual Chicago Garden Flower Show under the auspices of the club.

The show will be held February 25 to March 3, 1929, at the Hotel Sherman, Chicago.

The premium list is divided into eight sections. Section one is on luncheon tables, in which each garden club in Illinois is expected to enter. Section two is on window-boxes.

Section three on "miniature model", consisting of a garage and suitable yard and planting. The models will be exhibited on similar trays. The garage and tray will be furnished, also a board to use as rear wall of the house. Each exhibit will include a planting plant.

Section five is on little gardens. Each garden will occupy a space of four by eight feet.

Section six is on shadow boxes. Each box will be lined in black and will be thirty inches high and eighteen inches deep.

Section seven is on arrangement, consisting of an arrangement of buds, branch seed pods or any other natural growth other than flowers. No artificial flowers are allowed. Any container may be used.

Section eight is a conservation poster competition. The posters must be fourteen by twenty-two inches and have a conservative slogan.

Lectures and Pictures Every Day

There will be lectures and pictures every day during the

flower show. These lectures will be on gardens and allied subjects. They will all be free.

A tea-room will be conducted by members of the garden club, profits of which will go to the educational work of the Garden Club of Illinois.

Mrs. Fischer suggests that Wisconsin people organize a group and charter a special car to take them to Chicago. If a number of people go on one ticket, a reduced rate of one and one-half fare may be obtained. Also if a certain number go together, a special car may be had free. Call your local R. R. agent for information.

For more information in regard to the show write Garden Club of Illinois. Room 388, Hotel Sherman, Chicago, Illinois.

RACINE CLUB PLANS FINE PROGRAM

MRS. ARTHUR SCHACHT

AT THE next meeting, January 22nd, we plan to have a round table discussion on hints we have learned about in our gardening and think might be of help to our members. Also expect to have reports on the Horticultural convention which was held in Milwaukee last December.

On February 5th Mrs. Hitz will give an address on flower shows.

We are trying to learn all we can about flower shows as we hope to be able to have one in the fall.

On February 19th we plan to have a talk on rock gardens.

Plans are being considered to have a rock garden planted in some conspicuous place on a main highway leading directly into the city. All the members are very anxious that this be carried out. On March 5th garden plans will be in order. All have been urged to work on these through the winter months, also have been reminded that it is important to follow a plan when planting a garden.

March 19th will be a "Bird" program. This will be the time

(Continued on page 184)

Important - -

to Flower Growers

Now—you can quickly and safely rid your plants of those costly pests—

MEALY BUG—RED SPIDER—APHIS

Ced-o-flora
PLANT SPRAY
REGISTERED TRADE MARK

destroys them immediately without injury to the most delicate plant.

Proof

Alabama Floral Co., writes—

Trail can convinced us that it is just what we have been trying so many years to get to kill Red Spider and Mealy Bug. It does away with them the first application.

Ced-O-flora was originally placed on the market for the large grower and it has been used by them for some time. Wholesale Growers, City Park Departments, Estate Superintendents and others have found it extremely satisfactory as their continued use of it proves.

Now — **Ced-o-flora** is available in small quantities for use in home, garden or small greenhouse. It is economical to use because one pint of **Ced-o-flora** makes 26 pints of spraying liquid.

Ced-o-flora is the discovery of a professor of Horticulture in one of the leading Universities. It is the result of years of study and experiment. The most thorough tests have been made and in every case when used according to instructions the results have been fully satisfactory.

A. N. Pierson, Inc. Conn., one of America's leading growers use it and have complimented us on the product. Try it. Use it on your plants. It can be used with absolute safety and is guaranteed satisfactory or your money will be refunded. Use the coupon now for a trial size. 3 oz. bottle 50¢; ½ pt., $1.00; 1 pt., $1.50. Circular free on request.

Dealers.—Write for quantity discounts to serve your trade and for use in your store or greenhouse.

Cedo Products Corp.,

811 N. Clinton St., Syracuse, N. Y.

Cedo Products Corporation
811 N. Clinton St., Syracuse, N. Y.

Enclosed find check in the amount of $_____for which please send me_____size of Ced-o-flora on your money back guarantee basis.

Name .....

Street .....

City ..... State .....

Programs for Our Garden Club Meeting

ARCHIE S. HILL

THERE can be no doubt that the nature of the program provided at the meetings of any society exerts the greatest influence in maintaining it in a flourishing state, and in keeping the enthusiasm of its members at a high pitch.

For a garden club or horticultural society it is of course evident that subjects pertaining to floriculture, pure and simple, should be the predominant feature of the meetings. We in Milwaukee have had considerable success with a series of symposiums on the various popular flowers; roses, peonies, iris, phlox, gladiolus, etc.

At these gatherings it is customary for various members to contribute in different sections of the subject. To one is allotted the history of the flower, to another the best method of cultivation. Another member deals with the varieties and their merits or demerits, while the diseases to which the plant is subject are explained and remedies suggested by still another member. At the close of these papers a general discussion follows. The results of these meetings have been very gratifying and I personally can vouch for the fact that much valuable information is to be gained in this way.

Often our president, Mr. Huron Smith, brings forward some professional horticulturist of note and many useful hints are given by these gentlemen to aid us in our garden pursuits.

While admitting the success of these meetings, it becomes obvious that as the society grows older something outside the usual curriculum must be added if the interest of the older members is to be sustained. It is not advisable to go on repeating the same symposiums time after time, and some departure must be made from the beaten track.

The program for meetings is one of the largest problems confronting our clubs and societies.

In this paper presented by Mr. Archie S. Hill before the garden club section at the convention, he not only tells how successful programs have been planned for new clubs, but suggests topics for older organizations looking for something new.

Nearly every flower lover is an incipient naturalist and I think it would be interesting and profitable to have illustrated talks on natural history subjects which are closely related to horticulture such as the birds that frequent the garden. The various kinds of insects which may be found about the flowers and plants and their life histories would afford material for many interesting lectures. Little talks on botany, giving some insight into the less well known parts of plants, their structure and functions might also be given.

Another subject which is of vital importance and interest is the fertilization and crossfertilization of flowers. The process of cross-pollination is not well understood by the average garden club member and a demonstration of its simple rules and methods would surely be the means of increasing the already large number of new and improved varieties of flowers

STRAWFLOWERS

In many colors and varieties

Baskets made up $1.50 to $3.50

We mail these anywhere. Add 50c for packing and postage.

HARDY PERENNIALS

200 varieties

Send for Catalog on Strawflowers and Perennials

Chequamegon Flower Gardens

V. E. Brubaker, Mgr.
Washburn, Wis.

which have been produced by amateur gardeners. The accomplishments of Luther Burbank, while admittedly great, were by no means the result of any wounderful wizardry, but simply of a phenomenal amount of energy and painstaking effort in the utilization of well known principles. Any enthusiastic gardener may contribute his quota to the improving of garden flowers by emulating, in a small way, his determination to achieve results.

The topic of garden literature could be given more attention with advantage. There are a host of fine garden books, but at our meetings very little mention is made of them. New books should be brought to the attention of the society as they appear and extracts from the older ones might be read from time to time so that they may be brought to the knowledge of the members.

Our Milwaukee library has a very fine collection of garden books but I am sure that there are many interesting ones that are seldom read because their existence is not realized by many.

Another phase of gardening which is rather neglected at our meetings is the nature and proper use of fertilizers. A simple explanation of the various kinds of fertilizer, both natural and artificial, would be useful and would aid the members of the society or club in providing the proper fertilizer to produce certain definite results. This is a subject which is but dimly understood and it is no unusual thing to find some garden lover applying a strong nitrogenous chemical like sodium nitrate to some plant which already has produced too much leaf growth, in the vain endeavor to make it flower well. Much time and money would be saved by even a rudimentary knowledge of the virtues of the various fertilizers.

The propagation of plants, too, calls for more attention. In America, where money is more plentiful than in other countries, the amateur gardener is inclined to take the easy path and purchase his plants all rooted and flourishing from some nurseryman or florist. This is all very well and excellent from the florists point of view, but is not conducive to a thorough understanding of one's plants.

Few realize how easily our shrubs may be propagated by cuttings properly taken and cared for, and not only shrubs, but most of our perennials may

"DOUBLED MY POTATO YIELD"

Mr. Dama writes: "You have developed a potato fertilizer that can't be bettered. My certified Triumphs went over 300 bushels to the acre. Darling's Fertilizers doubled my yield—gave me bigger potatoes—larger setting under each hill.

"Your Big Harvest Brand gave my corn a quicker start and increased my yield about one-fourth."

DARLING'S FERTILIZERS

A Fertilizer for Every Soil—For Every Crop

Quickly available Nitrogen is provided by the scientific combination of materials in Darling's Fertilizers, which gives in correct proportion the 3 necessary plant foods—Nitrogen, Phosphoric Acid and Potash. A prompt and healthy start is insured to your germinating seeds and young plants. Then the nitrogen from the animal base continues to feed the plants throughout the season.

AGENTS WANTED
Write today for literature and information of our AGENCY PROPOSITION

Darling's Fertilizers contain less moisture. They are drier—easier to drill.

DARLING & CO.

4215 S. Ashland Avenue
CHICAGO, ILL.

Plants at Chicago and East St. Louis

Send for this Book Free on Request

be successfully increased by using simple methods of propagation.

The raising of plants, other than annuals, from seeds is a most interesting pursuit and more time might be devoted at the meetings to the consideration of the proper methods to follow in order to accomplish the best results.

Many of the things which I have mentioned have already been touched upon from time to time at our meetings but I think that more prominence should be given to them as they would help to vary the programs and at the same time be a means of increasing our interest in and knowledge of gardening.

GROWING RED RASPBERRIES

(Continued from page 169)

awarded a special mosaic-free certificate. The inspection has been so vigorous and so effective that this year an average of all the raspberry plants inspected and passed in the state of Minnesota were found to have had 3/10 of 1% of diseased plants. That is, only three diseased plants in a thousand were found and of course these were destroyed immediately. This 3/10 of 1% represents the effectiveness of the inspection the previous year. In 1927, 7/10 of 1% infection was found.

Raspberry growers who are not interested in the sale of plants can well afford to pay special attention to the mosaic infection in their fields. If they start with clean plants, it will unquestionably pay them to rogue out any diseased plants which may from time to time make their appearance. The better quality of fruit produced on healthy canes, the higher yield, the greater longevity of the plants make careful attention to mosaic roguing a matter of economic importance to raspberry growers.

In Minnesota in the past few years we have had a considerable infection of mildew which has unquestionably reduced the vigor of the plants to an appreciable extent. The Department of Plant Pathology is working upon the problem of the control of mildew. They found that this disease may be held in check very readily by carefully cutting out and removing all the weak canes and tiny sprouts in the fall and in the spring heading back the canes which have been left for fruiting. The disease carries over in the terminal growth. Where careful cleaning up of the raspberry plantations has been practiced, mildew has been very well controlled. The difference in the vigor of growth of plants in such controlled plots as compared with those affected with mildew is very striking indeed.

Anthracnose and spur blight are two diseases which are at times serious enough to warrant especial attention. Both of them may be partially controlled by cutting out the diseased and infected canes, but where heavy infection has taken place in the plantation, complete or satisfactory control can only be secured by supplementing the pruning with sprays of bordeaux mixture applied in the spring.

RACINE CLUB PLANS FINE PROGRAM

(Continued from page 181)

of year when birds are coming back and everyone is interested in them. The program will include a study on the different varieties most common in this community, how to attract them to the home grounds, kinds of houses to put up, where to put them and protect the birds from harm, also what to plant so as to provide food through the summer and winter months.

Sometime in April we expect to have motion picture slides on wild flowers, also will urge preservation.

Our meeting of last year on wild flowers was a big success. Slides were shown and several of the members brought specimens which were identified by Mr. Saunders, a botanist in our local high school. It was surprising to find how very much interested people are in wild flowers.

Then sometime in May we plan to have a surplus plant sale. The proceeds will go toward our treasury, but the main idea is to give many people who do not care to start plants from seed a chance to get these plants at a very reasonable price. In this way perhaps more will be planted and also will help make our city a more beautiful place to live in. In many cases gardeners hate to throw away good plants, and people are more apt to take interest in planting if they pay a little for them.

PIERCE COUNTY TAKES UP NEW WORK

MRS. ALVIN D. HURTGEN

AT THE last meeting a petition was sent to the County Board asking that a County Park Board be organized according to state law and also asking the cooperation of the County Board in putting on a contest for the beautification of home grounds throughout the county.

The County Board admitted that the Park Board existed and offered their "moral" support.

At our last meeting we decided to raise prize money in some way so we could put the contest on ourselves. We are also trying to formulate some plan by which we may be able to put on a contest for the planting of our bare little country school yards.

It has been decided to publish a series of short articles on gardening in our local papers on the topics "What to plant in a yard not fenced against chickens", "the Best Plants for Our Heavy Clay Soil", "How to Prepare Heavy Clay Soil for a Bor-

der", "Window Boxes", how to make them and what to plant in them.

These topics will appeal to the public in general and not only to flower lovers.

MADISON CLUB ELECTS OFFICERS

THE Madison Garden club held its annual banquet and election of officers Dec. 7 at Miss Brown's cafeteria.

J. G. Wynn was elected president; W. H. Milward, vice-president; Mrs. C. L. Dean, secretary; and C. W. Vaughn, treasurer.

Mrs. J. A. Reed and Frederick Bodenstein gave reports on their visit to the convention at Milwaukee, Dec. 5–7.

Reports of the various committees were given before the forty-four members present. Two new members, Mrs. H. R. English and Will Gilbert were admitted to the club.

TABLE OF CONTENTS

Page

The School and Home Beautification Project for Club Members ---165

North Dakota Notes---167
Growing Red Raspberries--168
Rock Garden Plants From Seed ---170

What Varieties of Apples Shall We Grow ---172

Best Varieties of Vegetables For Wisconsin ---174

Other Ways to Serve Vegetables ---175

Save Your Copies of Wisconsin Horticulture ---176

Plant Premiums ---176
Editorials ---176
Lime ---177

About the Home and Garden ---178

State Garden Club Federation News ---180

The Chicago Garden Flower Show ---180

Program for Our Garden Club Meetings ---182

What is the P. Q. C. A.---186
Milwaukee Florist Club---188

SEVEN APPLE GROWERS *average* $267.69 NET GAIN *per acre*

HERE are reports from seven apple growers in seven states from New York to Kansas. These growers all used Sulphate of Ammonia on part of their orchards and checked the gain on the fertilized trees. The results show a net gain of $267.69—over and above the cost of the fertilizer. Proof enough that fertilizing apple orchards with Arcadian Sulphate of Ammonia pays.

Grower	Variety	YIELD PER ACRE IN BUSHELS: Without Sulphate of Ammonia	With Sulphate of Ammonia	Increase	Net Gain Due to Sulphate
O. C. Olsen, Geneva, N. Y.	Baldwin	460	652	192	$ 56.40
Peter Sperow, N. Mountain, W. Va.	York	330	550	220	124.00
Edgar Hurley, Sabina, Ohio	35 year old Mixed	100	160	60	114.00
John Humphries, Monticello, Ind.	22 year old Maiden Blush	120	240	120	294.00
Ed. Strickfaden, Pekin, Ill.	18 year old Grimes	500	805	305	750.84
O. C. Webster, LaCrescent, Minn.	20 year old N. W. Greening	296	472	176	285.20
Walter J. Braun, Atchison, Kan.	Jonathan	204	346	142	249.36
Average 7 Growers		287	461	174	$267.69

Note: Tests Peter Sperow made by Joseph B. Prettyman, Vocational Agricultural Teacher, as cooperator; Edgar Hurley by Levi Lukens, Lee's Creek High School, as cooperator.

SAMPLE and BOOKLET FREE

ARCADIAN
Reg. U.S. Pat. Off.
Sulphate of Ammonia

The Barrett Company
AMMONIA-BENZOL DEPARTMENT
Agricultural Bureau
Atlanta, Ga. Memphis, Tenn. Norfolk, Va.
New York, N. Y.
Cleveland, Ohio. San Francisco, Cal. Toronto, Ont.

The Barrett Company (address nearest office) N-4-29 NJ

Please send me free copy of "*Sulphate of Ammonia in the Apple Orchard.*" Also send me free sample of Arcadian Sulphate of Ammonia.

Name .....

Address.....

KINDLY PRINT NAME AND ADDRESS

What Is the P. Q. C. A.?

E. L. CHAMBERS
State Entomologist

The control of plant pests and diseases is of concern to every horticulturist. In this article Mr. E. L. Chambers explains the new organization in charge of this work for the United States.

LIVING in a radio age we have learned to identify hundreds of broadcasting stations by certain letter combinations. When one speaking the radio language mentions station WGN there is at once an association with a certain station broadcasting from Chicago or if we hear an announcement broadcast from WLBL we immediately realize that we are listening to the market report issued by the Wisconsin Department of Markets from their broadcasting station at Stevens Point.

In an attempt to find short cuts in communication, both written and spoken, it has become a common practice to abbreviate by using the first letter in the word; thus in speaking of the Baltimore and Ohio railroad we have come to speak of it as the B & O.

So it is with our government phraseology. We find U. S. used almost altogether instead of writing out or saying United States, and U. S. D. A. is used for short when speaking of the United States Department of Agriculture.

The F. H. B.

After the legislature of our state and federal governments began to sense the cries of horticulturist and farmers for financial assistance in stamping out injurious insects and dangerous plant diseases which had been introduced into our country from foreign shores and began to stem the tide of these invaders which were threatening their industries, they set their machinery at work solving the problem.

On August 20, 1912, Congress passed a law creating the Federal Horticultural Board, which was authorized to make regulations relative to the importation of plant products from foreign this board by its initials "F. H. B." and it became almost mechanical to speak of it, we were compelled, on July 1, 1928, to recognize it no longer as such but as the P. Q. C. A., since on that date the plant quarantine and control work which was being reorganized came into existence as the "Plant Quarantine Control Administration." Anyone attempting to repeat this title for the first few times can readily see where the use of the initials greatly simplifies its usage.

DR. S. B. FRACKER
Charge Domestic Quarantines for the P. Q. C. A. Was until June 1927 connected with the Wisconsin Department of Agriculture as State Entomologist.

countries and to administer foreign and domestic quarantines as a protection from injurious insect pests and plant diseases. This Board, which we soon learned to speak of as the "F. H. B.", required the inspection and certification of all living plants before importation into this country, and by a system of permits and notifications respecting the movement of such stock, it is possible for the state inspector to inspect at destination. The work of this Board by 1926 involved the administration and enforcement of some twenty-two foreign and thirteen domestic quarantines.

Prior to the establishment of the P. Q. C. A. the plant quarantine and regulatory duties were scattered among different bureaus and offices of the department of agriculture in Washington. This was objectionable on account of the division of administrative authority and still more so because it required much of the time and interest of those who should be carrying on important research work. When this situation was brought to the attention of the Secretary of Agriculture early in the fiscal year 1927, he authorized that plans be worked out to bring together all plant quarantine and related regulatory and control activities of the department. The P. Q. C. A. received its final approval in the act making appropriations for the department of agriculture for the fiscal year ending June 30, 1929, and became effective July 1, 1928.

It involved particularly the Federal Horticultural Board and the Bureau of Entomology and, to a slight extent, work heretofore conducted by the Bureau of Plant Industry. The Bureau of Entomology has hitherto been charged with the detailed administrataion of large regulatory appropriations for the enforcement of quarantines on account of gipsy and brown-tail moths, Japanese and Asiatic beetles, the European corn borer, and the Mediterranean fruit fly in Hawaii. The only

appropriation to the Bureau of Plant Industry which involved work of this nature concerned the enforcement of the white-pine blister-rust quarantine. In the administration of these quarantine and control subjects, these bureaus had been, however, acting as agents of the board. In other words, the determination of quarantines and the regulations thereunder and their legal enforcement have been by the board under the authority of the plant quarantine act, the burden of field administration and of personnel and accounting being carried by these bureaus. This reorganization removes this work from these bureaus and transfers the appropriations and personnel concerned to the new administration.

The most important modification involves the carrying of the different items as subappropriations, which will make it possible for the Secretary of Agriculture to meet emergencies arising from unanticipated outbreaks of new pests under the provision in the act for interchange of appropriations within any bureau, division or office. Under the old system of appropriations for the Federal Horticultural Board no such adjustments could be made, except by action of Congress.

In addition to the plant quarantine and regulatory duties which come under the authority of the plant quarantine act of 1912 and the related Mexican border act, the new Plant Quarantine and Control Administration will be charged with the enforcement of (1) the insect pest act of 1905, (2) the act (1926) authorizing the inspection and certificate of exports to meet the sanitary requirements of foreign countries, and (3), in cooperation with the Post Office Department, of the terminal inspection act of 1915.

The principle of a plant quarantine advisory board is retained in this reorganization, but under a more appropriate title. The act making appropriations for the Department of Agriculture for the fiscal year 1929 provides that—

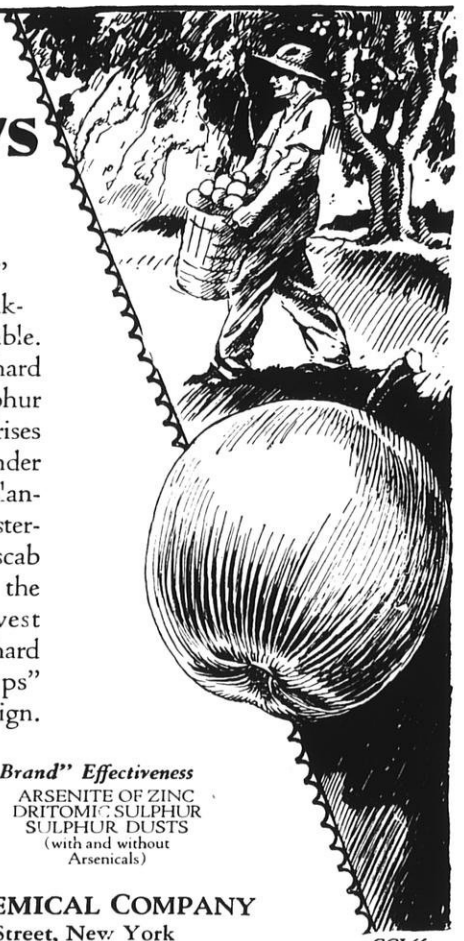
" * * * Hereafter the functions of the Federal Horticultural Board shall devolve upon and be exercised by the Plant Quarantine and Control Administration, the chief of which shall serve ex officio as chairmen of an advisory Federal Plant Quarantine Board of five members, the four additional members to be designated by the Secretary of Agriculture from existing bureaus and offices of the Department of Agriculture, including the Bureau of Entomology, the Bureau of Plant Industry, and the Forest Service, and who shall serve without additional compensation."

Jones (reading newspaper aloud): "The cyclone struck with terrific force, the house was laid in ruins, the piano upset, dishes were splattered against the walls, the—

Smith: "Great Scott! That reminds me I forgot to mail a letter for my wife!"

THINK OF YOUR HARVEST NOW!

Prevention Pays



It costs just as much to pick unmarketable fruit as it does a 90% "Fancy" and "No. 1" crop. Now is the time to start making this year's harvest more profitable. A thorough spraying with "Orchard Brand" Oil Emulsion or Lime Sulphur Solution, as soon as the temperature rises above a safe 45°, will keep scale under control. It's none too early to be planning your delayed dormant and cluster-bud sprays. You've got to stop scab infection on the foliage before the blossoms fall—or risk a harvest of scabby fruit. Let the "Orchard Brand" publication "Cash Crops" guide your spray and dust campaign.

You Can Trust "Orchard Brand" Effectiveness

LIME SULPHUR SOLUTION
OIL EMULSION
BORDEAUX MIXTURE
ARSENATE OF LEAD
CALCIUM ARSENATE
ARSENITE OF ZINC
DRITOMIC SULPHUR
SULPHUR DUSTS
(with and without Arsenicals)

GENERAL CHEMICAL COMPANY
40 Rector Street, New York
St. Louis Los Angeles San Francisco

GCI-66

ORCHARD BRAND
REG. U.S. PAT. OFF.
SPRAY & DUST MATERIALS

ORCHARD BRAND
SPRAY and DUST MATERIALS

Milwaukee Florist Club Past and Present

HURON H. SMITH

IS EVERYBODY happy? might well be the title of the picture of the newly elected officers of the Milwaukee Florists Club.

While it is an old organization, it is ever new. 137 members does not tell the story of the industry in this region, for there are lots more. There are 156 retail florists in Milwaukee and 66 growers.

It was not ever thus. Three quarters of a century ago, there was a group of florists and private gardeners that constituted the Milwaukee Florists Club and in 1853, they met at Casper Thomann's greenhouses on First and Auer Avenues to have their pictures taken. That is the picture you see reproduced here, and the man with the cross on his arm is Casper Thomann. He had a large greenhouse for that day and age, owning ten greenhouses facing on Auer Avenue running through to Burleigh Street and extending to First Street. Later these houses were moved back 200 feet to their present location, although none of the original houses are now standing. Mr. Thomann's daughter married John C. Rost in 1884 and they continued the business after Mr. Thomann's death. Mr. Rost died Feb. 16, 1927, but his wife still carries on the business at the old stand, —1315 First street. Her children are active in the business, as is she herself. They have four large houses growing mums, carnations, callas, pot plants, palms and the general run of things needed for a retail florists' business.

THE NEW OFFICERS OF THE MILWAUKEE FLORISTS CLUB

And a jolly bunch they are, isn't it the truth? Here are shown (but you'll have to identify them yourself) Wm. Kennedy, Jr. relected president; Chas. Dettman, vice-president; Eugene Oestreicher, reelected Secretary; Lawrence Pollworth, treasurer; and Carl Herber, trustee for three years.

The present officers of the

THE MILWAUKEE FLORISTS CLUB ASSEMBLED FOR ITS FIRST MEETING IN 1853

The cross marks Casper Thomann, Milwaukee's pioneer florist and father of Mrs John C. Rost.

Milwaukee Florists Club are: Wm. A. Kennedy, Jr., president (re-elected), proprietor of the large range of greenhouses formerly known as the C. C. Pollworth Company and now as Kennedy & Kennedy, Inc.; Chas. E. Dettman, of Dettman's Flowers, 1317 Green Bay Avenue, Vice-president; Eugene Oestreicher, the Pioneer Florist at 5623 North Avenue, re-elected secretary; Lawrence Pollworth, son of C. C. Pollworth wholesaler, Treasurer; and Carl Heiber, of the Chas. Menger Co., Inc., 536 27th street, newly elected trustee. Other trustees not present on election night are: Alfred Locker, of Hugo Locker and Sons, North Avenue, Wauwatosa, and Oscar Golin, of the August F. Kellner Co., 1384 Humboldt Avenue, Milwaukee.

The most recent news of the florists business here in Milwaukee is the formation of a new wholesale florist house. The firm will be known as the Rojahn and Malaney Co., Inc., and will hold forth at 468 Milwaukee street across the the street from the Holton & Hunkel Co. They are incorporated for $30,000 with all the stock held in the two families. They expect to open about February first with a line of cut flowers, greens and florist supplies. Mr. Walter A. Rojahn, president of the company, has been a road salesman for the A. L. Randall Co., of Chicago, for several years, with his residence in Milwaukee. Wm. T. Malaney, secretary-treasurer, has been the bookkeeper for the Gust. Rusch Co. here for many years.

INDEX TO ADVERTISERS

	Page
American Farm Machine Co.	171
American Forestry Co.	162–190
Bahr Nursery	190
Baker Nursery	162
Barrett Company	185
Beaver. Jeff & Sons	190
Beier, Chas. J.	162
Bolens Tractor	179
Cedo Products Co.	181
Chequamegon Gardens	182
Christensen, H. C.	171–190
Cleeremans Hatchery	190
Coe, Converse & Edwards Co.	171
Columbia Gardens	162
Cream City Chemical Co.	192
Cumberland Fruit Package Co.	189
Darling & Co.	183
Evergreen Nursery Co.	189
Excelsior Nursery	162
Farmer Seed & Nursery Co.	179
Far North Gardens	162
Fitchett Dahlia Gardens	190
Floriadale Gardens	162
Gelbke, C. A. & Sons	190
General Chemical Co.	187
Gifford, F. R. Co.	191
Goldsmith, Mrs. C. A.	190
Gumtz, John	162
Hauser, J. F.	189
Hecklinger, Fred	162
Jensen, John	190
Joelson, Mrs. Alfred	162
Jung Seed Co., J. W.	162
Maloney Bros. Nursery	191
McKay Nursery Co.	192
North Star Nursery Co.	179
Olds Seed Company	174
Otwell Iris Fields	174
Palmer, Lew	190
Rasmussen's Fruit Farm & Nurseries	191
Russell, A. B.	162
Sisson's Peonies	192
Standard Engine Co.	189
Stonecrest Gardens	162
Strands Nursery	171–190
Swedberg Bros. Nursery	162
Terrell's Aquatic Farms	162–190
Toole, W. A.	190
Waterloo Floral Gardens	189
White Elm Nursery	191

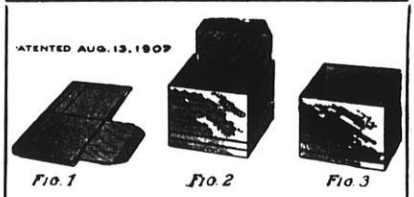


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

STANDARD GARDEN TRACTOR

Plows Seeds Cultivates Mows Hay and Lawns

A Powerful Tractor for Small Farms, Gardeners, Florists, Nurseries, fruits Growers and Poultrymen

DOES 4 MEN'S WORK

Walking and Riding Equipment.

Free Catalog. Does Belt Work.

STANDARD ENGINE COMPANY

3241 Como Ave. Minneapolis, Minn.

CHRISTMAS TREE PLANTATIONS

Get in on the ground floor for the huge Christmas tree market that is rapidly developing.

GROW CHRISTMAS TREES—THERE IS MONEY IN IT!

Write for complete information and prices on suitable stock.

EVERGREEN NURSERY

Established 1864 **Sturgeon Bay, Wis.**

WATERLOO FLORAL GARDENS
QUALITY GLADS

100 choice blooming size Gladiolus bulbs, for $2.00.
FOB cash with order for 10 each, 10 varieties.
30 No. 1 bulbs, Ex. Mixed, $1.25

WATERLOO FLORAL GARDENS
Eugene B. Porter, Prop.
Waterloo Wisconsin

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

SHRUBS — ORNAMENTALS — ASPARAGUS Plants. West Park Nursery, C. A. Gelbke and Sons, Appleton, Wis.

TREE AND SHRUB SEEDS FOR sale. Many varieties. Write for price lists and planting directions and how to grow trees from seeds. Early orders will be appreciated. American Forestry Company, Pembine, Wisconsin.

NURSERY STOCK—SHRUBS

NURSERY STOCK FOR SALE. American Arbor Vitae, many sizes at reasonable prices. Send for large lists and planting directions. Order early for spring time planting. American Forestry Co., Pembine, Wisconsin.

FOR SALE: NURSERY STOCK. FRUIT and ornamental trees. Shrubs and perennials. Send for list. Bahr Nursery, Manitowoc, Wis.

GLOXINIA BULBS, BEST QUALITY, several colors and shades. Each, 35c, per dozen, $3.50. Mrs. C. A. Goldsmith, Box 12, Beldenville, Wis.

LILY BULBS

REGAL LILIES. Nice blooming bulbs $2.00 per doz. Extra large size $3.25 per doz. Post paid. H. C. Christensen, 1625 Ninth St., Oshkosh, Wis.

WATER LILIES, ORNAMENTAL Water Plants, Berry-bearing shrubs and Plants for attracting birds, etc. Write Terrell's Aquatic Farm, 1006 W. Blk., Oshkosh, Wis.

STRAWBERRY PLANTS

25 MASTODON STRAWBERRIES OR Latham Raspberries. Postpaid $1.00. 4 Evergreens, Trees, Shrubs or Vines $1.00. Landscape suggestions and catalog on request. Strand's Nursery, Box 23, Taylors Falls, Minn.

STRAWBERRY PLANTS FOR SALE— Dr. Burrill, Dunlap, Warfield and Reynold's Special. $4.50 per 1,000; .55 per 100. Beavers, $8.00 per 1,000; $1.00 per 100. All plants government inspected and raised on new land. Order now. John Jensen, Warrens, Wis. Phone: Tomah AA740.

STRAWBERRY PLANTS — PREMIER, Beaver, Champion, Everbearing. Jeff Beaver & Sons, Eau Claire, Wis.

OUR CHICKS PAY

LEEREMAN'S
Quality Accredited
HICKS
Are Money Makers. Place your order with us and decide for yourself.
CLEEREMAN'S HATCHERY
Green Bay, Wis. R2J
Life Member W. S. H. S.

Send $1.00 for
1 Mt. Ash, 7 ft., or
4 Bridal Wreath 2–3 ft.
DAHLBERG NURSERIES
Ladysmith, Wis.

RASPBERRY PLANTS

FOR SALE—CUMBERLAND BLACK raspberry plants, double inspected stock. $3.50 per hundred. Lew Palmer, Route 1, Box 5, Baraboo, Wis.

DELPHINIUM SEED FROM THE BEST English (Wrexhams) and American Hybrids. Liberal packets, $1.00. Half packets, fifty cents. John N. Lowe, Marquette, Michigan.

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which described as well as dozens of Hardy Perendainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

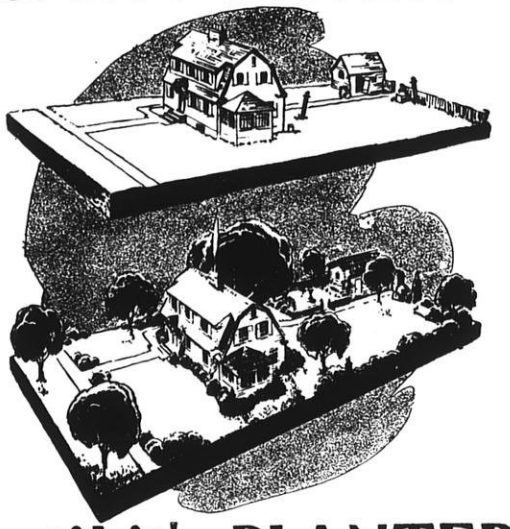
We aim to grow

Good Dahlias

Bulbs that will produce in your garden blooms as good as—or better than—you saw in our garden or at our various exhibits last fall. Catalogue on request. Early orders accompanied by cash receive a special premium.

Fitchett Dahlia Gardens
735 E. Milton Avenue
JANESVILLE, WISCONSIN

It's not a Home-



until it's PLANTED

Before you buy write for our booklet suggestions on beautifying your home grounds!

McKAY NURSERY COMPANY

Offices: Madison, Wis.
Nurseries: Waterloo, Wis.

WISCONSIN'S GREATEST NURSERY

SPRAY MATERIALS
Lime sulphur solution
Lead arsenate
Dendrol

PRUNING TOOLS
Saws Shears
Pole Pruners

FERTILIZER AND LIME SPREADERS
Nitrate of Soda
Sulphate of Ammonia
Mixed Fertilizers
Geyer End Gate Spreaders

F. R. GIFFORD CO.
2201 University Ave. Madison, Wis.

White Elm Nursery Co.
Hartland, Wisconsin
General Line of
Ornamentals and Fruits

Dependable—

That is a quality we constantly strive for; we want every customer to feel confident that his orders will be cared for in a dependable manner, and that the plants he receives will be of highest quality and absolutely true to name and description.

We grow a complete line of fruit and shade trees, ornamental shrubs, perennials, climbing vines, berry plants, etc. consisting of the best varieties.

—Catalog on Request—

Visitors Always Welcome

RASMUSSEN'S
FRUIT FARM AND NURSERIES
Oshkosh Wisconsin

MALONEYS

Specialize in Cherry, Peach and inspected Apple Trees

Big Assortment of Shrubs, Roses, Flowers, Berries

Write For Our Big Free Catalog

Maloney Bros. Nursery Co., Inc.
DANSVILLE NEW YORK

Berry Boxes and Crates

Either made up in the K. D., American Quart Berry Baskets, Climax Grape and Peach Basket, Till or Repacking Baskets, Plant Boxes and Veneer Tree Protectors.

Circular and Price List mailed upon request.

Write for special prices on carload lots.

Liberal discounts on early order.

Sheboygan Fruit Box Company
Sheboygan, Wis.

W. A. Sisson W. A. Lawson

Sisson's Peonies
Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

Use The Highest Quality

LIME SULPHUR

33° Beaume Solution, For Best Results

Made in Wisconsin

Prepared from the choicest raw materials
and
Priced to serve Wisconsin Growers best

Manufactured By

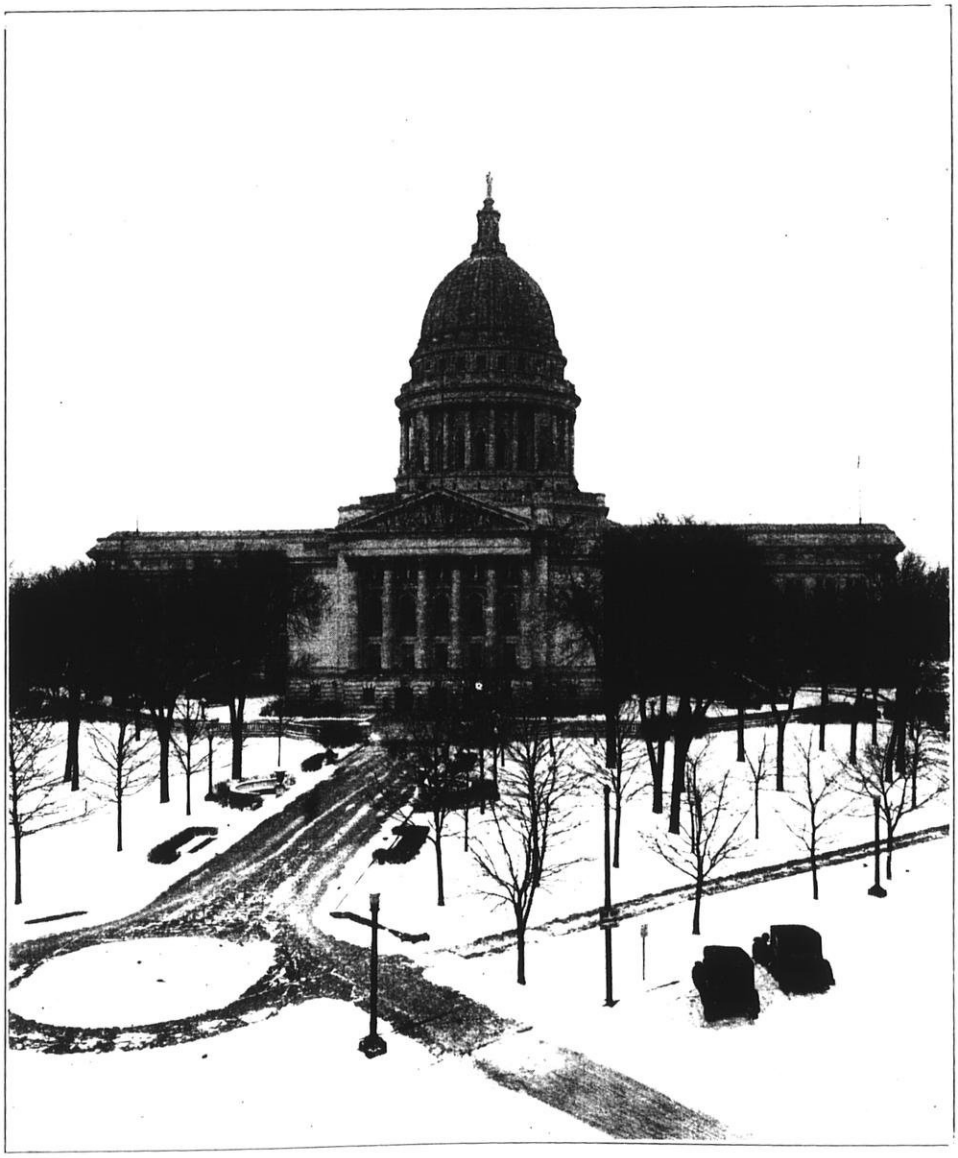
Cream City Chemical Works

766-774 Kinnickinnic Avenue Milwaukee, Wis.

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

Vol. XIX MARCH, 1929 No. 7



Last Month For Free Plant Premiums. See page 206.

Latham Raspberry Plants
State Inspected
$2.50 per 100 $20.00 per 1,000
Free from mosaic and other diseases

Strawberry Plants
Senator Dunlap; Premier
100 ..... $ .75
1,000 ..... $ 5.00
Progressive
100 ..... $ 1.25
1,000 ..... $10.00
Mastodon
100 ..... $ 2.00
Order Early
FRED HECKLINGER
Route 7 Menomonie, Wis.
Phone 520-W

BARGAINS

100 finest Gladiolus Bulbs $2.00 F. O. B. or $2.25 postpaid, 10 varieties 10 each. Spring delivery.

30 popular Iris roots, 5 each 6 kinds for $2.25. Postpaid April—July—August delivery.

6 Peony roots, 2 red, 2 white, 2 pink for $3.00 postpaid. Sept.—Oct. delivery.

STONECREST GARDENS
Eau Claire, Wis.
Send for catalog. It's free.

GLADIOLUS BULBS ASSORTED

	Per 100
Large size	$2.00
Medium size	1.00
Small size	.50
Bulblets, per quart	1.50

THERON M. MOSER
Richland Center, Wis.

STRAWBERRY PLANTS

	Per 100	1000
Premier	$ .80	$6.50
Minnehaha	.80	6.50
Minn. 999	.80	6.50
Sen Dunlap	.75	6.00
Warfield	.75	6.00

Cash with order, please
MRS. ALFRED JOELSON
R 1 Chetek, Wis.

Excelsior Nursery
CHAS. HARALSON
Wayzata, Minn.
Growers of Minnesota new fruits and other hardy nursery stock for the Northwest.
Write for price list.

GLADIOLUS

1 dozen Gladiolus bulbs, all large, 12 different varieties, packed separately and labeled, one dollar, postpaid for February and March.

A Few Specials In Large Sized Bulbs

	Per bulb
Avalon	15¢
Tiplady	10¢
Lacinatus	25¢
Peach Rose	25¢
Baron J. Hulot	10¢

FLORIADALE GARDENS
Wm. R. Leonard, Prop.
Route 1 Ft. Atkinson, Wis.

FOR SALE
Strawberry plants—Senator Dunlap, Gibson, Dr. Burrill, seven other kinds. Tree Strawberry. Everbearing Progressive, Mastodon Champion. Everbearing Raspberry, St. Regis, Latham.
Dahlias—Gladiolus—Peonies.
State Inspected. Write for prices
CHAS. J. BEIER Stoddard, Wis.

Gladioli, Irises, Lilies and hardy perennials. Beginners collection mixed glads, $1.00 per 100, 1 inch size.
The Far North Gardens
Iron River, Wis.

WILD FLOWERING PLANTS
Make city lot or large estate beautiful-valuable-interesting. Flowering land and water plants-berry-bearing shrubs that attract birds-fish-animals.
Suggestions-*price list free.*
Terrell's Aquatic Farm
1008W Blk., Oshkosh, Wisconsin

HARDY SHRUBS
Our catalog contains a complete list of hardy shrubs, Wisconsin grown, at bargain prices.

GARDEN SEEDS
Our Wisconsin grown garden seeds are unexcelled for earliness, hardiness and productiveness.
Our catalog is filled with special prices on farm, garden and flower seeds, plants and shrubs.
Send for free copy today.
J. W. JUNG SEED CO.
Box 48, Randolph, Wis.

Nursery Stock
Seed Grains
Landscape Service
BAKER NURSERY & SEED CO.
Fond du Lac, Wis.

10 Delphiniums $1.20
Gold Medal Hybrids, 6 Plants 70c Prepaid
25 Gladiolus Bulbs $1.00
Improved, Wonderful Shades
Mixed Varieties
6 Elegant Lilies $1.00
Dwarf, scarlet upright flower
Blooms in June
8 Tiger Lilies $1.00
Fall, red spotted flower
July bloomer
Full line Minnesota Station new fruits, Apples, Plums, Cherries etc.
Nursery Catalog Free
Order Now—Spring Shipment
SWEDBERG BROS. NURSERIES
Battle Lake Minnesota

Ask for our catalog listing 100 varieties of Dahlia and Gladiolus bulbs
COLUMBIA GARDENS
Cedarburg, Wis.

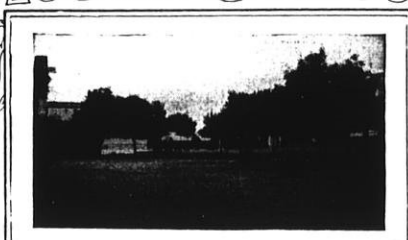
Selected Latham Raspberry plants. From high grade stock. Mosaic Free Inspected Two years.
$50.00 per 1,000 $30.00 per 500
$17.50 per 250 $ 7.50 per 100
A. B. RUSSELL
Route 1, Eau Claire, Wis.

TO PLANTERS
Hundreds of Varieties
Millions of little trees, shrubs, plants and tree seeds.
Write for price lists
American Forestry Co.
Pembine, Wisconsin

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables



OFFICERS

President
C. J. Telfer, Green Bay

Vice-President
M. B. Goff, Sturgeon Bay

Secretary
H. J. Rahmlow, Madison

The Chicago Garden and Flower Show

Illinois Garden Clubs and Florists Stage Wonderful Show

THE 1929 Chicago Garden and Flower Show will go down in Horticulture history as a show of unsurpassed educational value. It was about twice as large as we expected and in quality we have never seen it equalled.

Briefly as to its size—it took up two entire floors of the large Sherman Hotel. The first floor was devoted to exhibition gardens, cut flowers and commercial exhibits. The second floor was taken up by the garden clubs with one of the most educational as well as beautiful shows we have ever seen.

A few figures may give a better idea of the size of the show. 39,165 sq. ft. of floor space was used. This is about the size of eight rooms 50x100 ft. To make up the exhibits the following materials were used:

10,000 lbs. Balsam, shipped in from Wisconsin
150 bales of peat, 150 lbs. per bale
350 sq. ft. creeping bent grass
55 cu. yds. black soil
14,000 brick
10 tons mortar
112 yds. sand
115 tons stone (3 carloads)
250 growing evergreens
500 cut evergreens

Nothing in the show was artificial. Rock gardens were built up of real rock with blooming rock plants growing in soil. Formal gardens were laid out with bulbous plants and perennials in bloom, and forest preserves contained real trees and wild flowers, such as Trilliums, Cypripediums, etc.

A 1928 Shadow Box Winner

The Garden Clubs of Illinois, and Mrs. Fredrick Fisher, the President, who spent several months planning the show, are to be complimented on the splendid showing made in the garden club section. 64 garden clubs cooperated. Practically each one of them exhibited miniature models, shadow boxes and conservation posters. A great many exhibited in addition, luncheon tables, window boxes and little gardens.

A fine lecture program consisting of talks on landscape design, water lilies, peonies, insects, flower arrangement, evergreens, etc., was presented each day.

The crowd was large. 14,000 paid admissions at 50¢ each were reported on Wednesday, and a total of 100,000 were expected during the week. The total income of the show was perhaps $75,000 including sale of commercial booths.

Some of the Winners

The composition of some of the winning exhibits may be interesting. In the shadow boxes, which were 30x24x18 inches,

lined with black cloth, the winning exhibit was of Spanish Iris, (lavendar, blue and gold) and yellow Pernet roses. Second prize went to an exhibit of three Calla lilies arranged in Japanese style.

There were five rows of luncheon tables the length of a large room. Each table was 36x72 inches, set for six. No silver was allowed. The majority of them were set in antique style. The winning table was designed of amber glass tableware, consisting of two odd bowls, with yellow Calla lilies, amber plates, goblets and cocktail dishes, set on a black plate glass table cover. Napkins were the only linen used.

A very unique design was the "Pirate Table", set on a rough board table, with Pewter plates and mugs, wood decanter, old style candle holder, a cask of "pieces of eight", a pirate figure on a coil of rope, and paper swords in the center of the table.

Although we didn't count them, there must have been over 50 of the miniature models, and these were among the most interesting and educational of the exhibits. As one garden club member expressed it, "It's a lot of work to make one of the models but it is fascinating and very instructive. When you have made a model you know how to design a yard."

The models were on trays about 20x36 inches, made on a scale of ¼ inch to 1 foot. The rear wall of the house and garage was furnished. A great many were designed for families of moderate means, and were very practical. It took about an hour to see them all.

The window boxes were fine. A box, size 8x32x6 was placed in front of a chimney window, which was fitted to curtains and other accessories. The boxes were all well planted and decorated.

The conservation posters were also very good. The winning poster consisted of an outline of the state of Illinois with a landscape design, and above the word "make" and below, "beautiful".

We must also mention the fifteen elaborate "Garden Plots" put on by garden clubs. These were built along the sides of a large hall and were 4x8 ft. in size. The different titles were: "The Entrance Terrace", winning first prize; "The Bird's Own Corner", winning second prize; "The Garden Picture", winning third prize. Others: "A Rock Garden Retreat"; "A Flowered Walk"; "Within The Garden Wall"; "My Garden Retreat"; "A Garden Of Content"; "A Pot Planted Garden"; "A Moraine Garden"; "A Secluded Nook"; "Springtime"; "A Little Garden"; "A Practical Garden"; "Along The Garden Walk"; "A Quiet Spot In The Garden"; and, "The Seaside Garden".

Then there were the large "Exhibition Gardens" put on by various large concerns. These were very elaborate. The titles and exhibits were:

A Florida Garden, by West Park Commissioners
A Stairway Garden, by West Chicago Parks
A Temple Garden, by the South Park Commissioners
Water Garden, by Lincoln Park Commissioners
An Impression from Our Forest Preserves, by The Preserve of Cook County
A Formal Garden, by Vaughan Seed Store
Ravine Garden, by Vaughan Seed Store
"The Home Approach", by Oakshore Nursery
Garden Rest, by Swain Nelson & Sons Co.
A Rock Garden, by E. A. Lynn, The Rustic Man
A Garden Feature, by Arlington Landscaping Service, Inc.
Spring Garden, by Joseph Kohout and Co.
A Wall Fountain Garden, by Joseph Michal

A large number of Wisconsin people attended the show including all the officers of the Wisconsin Garden Club Federation and delegates of many garden clubs. Plans are now being made for a show in Wisconsin, although, to start with, it will necessarily be on a smaller scale.

If we are ever going to get very far in beautifying our homes and our cities, we must have these shows to acquaint our people with the truly beautiful, and inspire them to do more along these lines.

KANSAS GARDENS

THE above is the title of the official magazine of the Kansas Associated Garden Clubs. It is published at McPherson, Kansas. Mr. W. A. Flint, Hiawatha, Kansas, is president of the club and makes the report that in December 1928 they had 21 affiliated clubs with a total membership of 1224 which is an increase of 195 members during the year.

In discussing the organization of garden clubs, the editor says, "The first thing to decide on is the size of the club. If meetings are to be held in members' homes thereby saving hall rent, it is best to keep the membership under 50, limited to active gardeners. Officers complain that when "dead wood" gets in, the club is unwieldly and hard to manage.

The important thing in keeping a club alive and active is the program."

The editor continues: "Some clubs have a regular monthly meeting in winter, with lectures, and the summers are given up to garden visiting, lawn parties and similar affairs.

If Mrs. Jones in your club grows better glads than anyone else, get her to tell the club just how she does it. Or, Mrs. Smith may read a paper on iris which she prepared from back numbers of a garden magazine.

By all means have one meeting on house plants, a subject dear to many a gardener. One meeting should be on garden literature."

Garden clubs have the same problems the country over.

The Aims of the Horticultural Society

How We Hope to Accomplish Them

J. E. LEVERICH—Sparta
Presidents Address

AGAIN we are together in Annual Convention to review the work we have accomplished and to make plans for the future activities and up building of the Society. Wisconsin is richly endowed with many advantages as a horticultural state, and the possibilities for the further advancement of our work are unlimited, that is, there are many new fields that we may enter.

The State Horticultural Society covers a wide range of activities. It is an organization of Fruit, Flower, and Vegetable growers, or any other people who may be interested in horticulture in the state. It covers both the Commercial and Amateur field. In fact more than 90% of our total membership are amateur horticulturists, and much of the real interest and enthusiasm taken in the society comes from amateur ranks. While at times in the past there may have been some misunderstanding between the amateur and commercial horticulturists within our ranks, there is no reason for such a condition to ever exist.

As I see it, our main purpose and function is to serve as a parent organization, and to yield a guiding influence on all local and auxiliary organizations affiliated with us. In other words, we should be the "tie that binds" these different organizations into one, for the furtherance of our work, without in any way taking their individual identity from them.

How can we best serve, and accomplish results worth while?

1st. Through the medium of a good horticultural publication, such as we are now building up. This magazine must be kept up and contributed to by members within the society, as well as outside help. It should be our organ of communication with one another. There are unlimited possibilities that can be accomplished through the medium of our Horticultural Magazine. It has shown a marked improvement the past year. However, I am sure the Secretary and Editor will agree with me when I say it is not yet what it *can be* if it were better contributed to, and supported by members of this society, many of whom are writers of marked ability, could they only be interested in contributing articles to it.

J. E. Leverich, Sparta

This address presented by Mr. J. E. Leverich at the convention was hailed as one of the best statements of the aims and purposes of the Society ever presented. The convention voted to publish it in full.

Mr. Leverich served as president of the Wisconsin State Horticultural Society in 1927 and 1928. He was vice-president from 1924 to 1926, while Mr. W. A. Toole of Baraboo was president.

He is no doubt the largest grower of strawberries in Wisconsin, as was his father, J. W. Leverich, before him.

2nd. Increased membership.

As for increasing membership in this society, it must come mainly through the formation of local or auxiliary societies and their affiliation with this society. Of course we welcome individual memberships where there is no local organization. I might say that we have more than doubled the membership during the past year, and we are still growing and in a prosperous condition. We have now twenty affiliated societies, and a total membership of over 2400. This increased membership should bring renewed enthusiasm into the society, and I feel it has. And this parent organization, which is nearly as old as the state itself, has assumed greater responsibilities and must give more help to its members and auxiliary societies than it has been called upon to give in the past.

We must not allow ourselves to be too easily self satisfied. That condition has spelled the downfall of many well intended organizations. If we are going to continue to prosper, and continue to be *worthy of our existence*, we must seek a closer relationship with our members and our auxiliary societies, through the secretary and other officers of this society. We cannot propser and show a healthy condition unless our affiliated societies also are in a healthy and prosperous condition. In short, we should be in close touch with our locals at all times, and not leave them to drift by themselves, for by so doing we lose interest in them, and they likewise lose interest in us.

3rd. Better conventions.

Having turned out a better magazine and increased our membership, our next point of contact must be through our conventions and fruit, flower, and vegetable shows.

Our conventions in the past have not been attended as they should have been. In other words, we have failed to sell the value of our work to the people who should be interested in it. However, I am led to believe once we have accomplished the first two points I have mentioned, the third will be taken care of and the number attending our conventions will be greatly increased. I think you will agree that every local and affiliated organization in the state should be represented at our annual convention with at least one delegate, and as many more as they can afford to send. I feel that we should devote a certain section of our program to hearing reports from these representatives of our local and auxiliary societies, as to what they are doing, planning to do, and general condition. I am of the firm opinion that this part of our program would, in time, become one of the most interesting and instructive parts of our whole annual convention. New leaders would be brought out, new blood, so to speak, would be brought into our society and we would all profit thereby.

I have felt for some time that our programs were running too much to the theoretical or scientific solution of our problems, without enough of the everyday solution by our own growers in the field. True, we must know the scientific side of horticulture. That is highly essential. But I dare say that the majority of people attending our annual conventions are amateur, or beginners. And many of us who have given papers in the past, myself included, have entirely forgotten that we are speaking to the fellow who is trying to get started, and who wants to hear the ABC's of his chosen line. I believe the Wisconsin State Horticultural Society should aim to help those people throughout the state who know nothing about the game.

Let us not start with pictures of how a project should look when completed, let us first tell them, or show them how to prepare the soil properly, fertilize, how to plant, cultural methods, parasites and diseases they will have to contend with, and method of control.

I am glad to report that a closer working relationship now exists between the society and the Horticultural Department at the University than has ever before to my knowledge. Prof. Moore and his able staff of Assistants have been of great help to us in the furtherance of the work of this society. Perhaps in the past there may have been some misunderstanding of the scope of activities of each. However, if such may have been the case, I see no reason for it now. We are all working to the same end and with the same object in view. The Horticultural Department furnishes us with the scientific information necessary in our work and we growers prove the practicability of such information through every-day practices.

Last year we set out on a program of bringing some knowledge of Horticulture to every home in the state. Though starting out in only a small way in Boys' and Girls' club work and other publicity work, much good has come from it. However, it will take some time to show outstanding results. It is a worthy task, for through it, we will secure better boys and girls, men and women, through bringing in to their lives the production of more beautiful things. For we will all admit that the growing of flowers, fruits, and vegetables really makes the world a better place to live in, and brings joy, contentment and happiness to a countless number of lives. Horticulture is uplifting, it means loftier ideals.

Future Aims and Outlook

1st. It should be the aim of this society not only to secure the production of more fruit, flowers, and vegetables — but better fruit, better flowers, and better vegetables. This being an age of progress, we should always be looking for something better in our line.

2nd. We should advertise the food value of our product and acquaint the buying public with the fact that fruits and vegetables have a food value to the human body the same as the dairyman advertises the food value of his product. We have not been giving enough publicity to this end of our business.

3rd. Next in line comes the marketing of our product. If we can produce a demand for our product, through advertising, it will help in the marketing of it. This is the most important problem that confronts the commercial grower at the present time, and this society should help in the solution of it.

4th. We should also make more of a study of cost of production, which is of great importance to us all, especially the commercial growers. This is an interesting field of labor which we have as yet left untouched.

5th. I hope the time is not far off when the society and the Horticultural Department at the University can work out some plan for the establishment of a trial orchard, small fruit plots, and a model flower and ornamental garden, to be run for experimental purposes, and located somewhere on University property. It appears that this could be done in a cooperative way, with both units working together. I would suggest that the future officers of this society investigate the feasibility of this project.

I also feel that we would add materially to our exhibit

(Continued on page 213)

Beautifiers for American Girls

BERTHA CLOW,
College of Agriculture,
University of Wisconsin

DEEP down in all our hearts, yours and mine, there is a secret desire for beauty. Every girl would like to be just as attractive as she can. We all know that the most attractive girls have rose tinted cheeks, red lips, sparkling eyes and well-cared for teeth. Also they keep themselves from getting overweight, or on the other hand, from getting skinny.

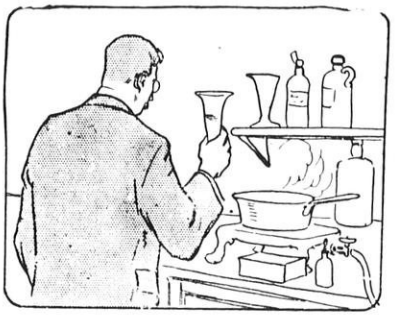
The corner drug store is well equipped to supply us with all kinds of artificial beautifiers, but they give only a temporary effect which disappears with the first touch of wind or water. This painted girl may look like a wasted ghost in the cruel morning light before she has had a chance to get on her "war paint". Which one of us would not prefer to have this natural blush of health on her cheeks from the earliest morning until night? I am going to tell you about the materials which will make your cheeks rosy, your lips red, your eyes sparkling and your weight about what it should be.

Most of these beautifiers are foods, others are good health habits. Tell me what you eat and I will tell you what you are. Many graves have been dug with a knife and a fork—so many girls eat their way towards sallow skin, dull eyes and a lack of vitality by hammering their stomachs with the wrong foods.

So I take great pleasure in introducing to you the beautifiers for American girls.

1. Cream-kissed carrots, rouge for the cheeks and lips. No dressing table is complete without nature's paint brushes. No matter how tender or beautiful your skin, you can use cream-kissed carrots with the utmost of confidence. The directions are to use yellow carrots prepared in white milk twice a week for one month. By mixing these two colors within the body permanent tint should appear on the cheek.

2. Complexion powders obtained from whole wheat or



graham bread. Guaranteed equally well suited to blondes or brunettes.

3. Skin softener—why be pale and sallow when one of the most perfect beauty secrets of the ages hangs from the boughs of the nearest fruit tree. Perhaps the nearest fruit tree is an apple tree or an orange tree or a peach or pear tree, or perhaps you will have to go to the grocer, but all kinds of fruit are highly recommended as skin softeners. They will remove unsightly rashes from the face and help develop a soft white skin.

4. Cow's vanishing cream is one of the most exquisite beautifiers. It will bring relief to your tired body, firmness to your weary bones. It will give you a priceless jewelled smile, a double string of pearl teeth surrounded by ruby lips. Enough is manufactured for young growing girls to drink 4 glasses daily and grown up girls to drink 2 glasses.

5. The water of life. For best results at least six glasses should be taken daily.

6. Vanity cases—in several shades of green, made of leafy vegetables. We all know how essential it is to have a vanity case—likewise our bodies need leafy vegetables. There is one in particular that I want to talk to you about and that is spinach. I can almost see your noses turning up. True enough "just spinach" isn't very good. I wish you would try this: make a thick cream sauce and melt in quite a bit of American cheese. Stir cooked spinach into this and serve buttered bread crumbs on top.

Some of the other beautifiers which I shall just mention are: Powder puffs, made from fluffy baked potatoes; Perfumes, squeezed from fresh, luscious fruits; Eye Sparklers, made of phosphorus taken from tempting creamed onions; Vanity brushes for the teeth; Vanity Scales, just as important as the mirror. They will reflect the height and weight of your beauty and the beauty of your height and weight.

In conclusion I am going to give a doctor's prescription for rosy cheeks and a smooth skin. Buy a box of rouge at the corner drug store, walk three miles out into the country and bury it three feet deep. Then each morning after a breakfast of fruit and milk and whole wheat toast walk the three miles and see if the rouge is still buried.

Thus by the right kind of food, plenty of fruits and vegetables and at least a pint of milk daily, and in addition good health habits of cleanliness and exercise you may become an American girl of beauty, charm and joy.

Parts of the above talk have been taken from work done by the speaker when in Dairy Council work. The idea of the talk originated with the American Child Health Association.

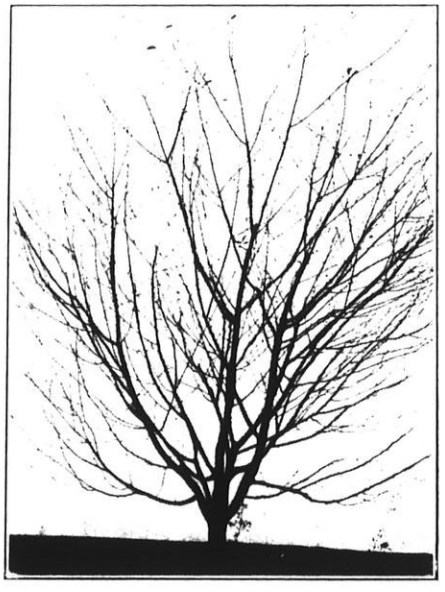
Cherry Leaf Spot Control

Results of Tests with Bordeaux Mixture and Lime Sulphur, and the Time of Application

R. E. VAUGHAN
Department of Plant Pathology
University of Wisconsin

CHERRY leaf spot is the common fungus disease of cherry trees in Wisconsin orchards. It is of long standing, has been under observation and made the object of experimentation by Dr. G. W. Keitt and his associates in the experiment station for a number of years.

The season of 1928 was cool and dry during the first few weeks and as a result the start of leaf spot development was delayed beyond that of some seasons. An examination of the leaves by Mr. Wilson on May 3 showed no mature spores. An examination May 14 showed a few half grown spore sacks. The first spore discharge of the season was observed during the rain of May 17. Other spore discharges occurred during or following each rain during the balance of May, all of June and early July. The heaviest discharge occurred on June 13 when 111 spores were caught on a square millimeter of glass slide.



TREE ON LEFT SPRAYED WITH LIME SULPHUR
UNSPRAYED TREE ON RIGHT SHOWS DAMAGE DONE BY LEAF SPOT— LEAVES OFF, CHERRIES STUNTED, TREE INJURED.

No cherry leaf spot spores were found in the air filtration apparatus located in the Dudley Apple Orchard 75–80 feet distant from the cherries. This would indicate that the spores are carried by the wind only short distances from place of discharge from the old leaves on the ground to newly expanded cherry leaves. The first development of secondary spores or conidia was observed June 1 on the sepals and blossom calyx cups. Leaf infection was not seen until June 29. Beginning in early July abundant conidia were produced till the end of the growing season. The small amount of early infection was associated with the relatively low temperatures which had prevailed up to July 1. With the heavy rains after mid-July leaf spot and defoliation became general in all unsprayed or inadequately sprayed orchards.

Materials Used for Control

Standard spray material for the control of cherry leaf spot has for some years been Bordeaux mixture. Owing to the reported experiments from Michigan and the practices of the leading apple growers, however, lime sulphur has been given rather extensive trials. Comparisons were made in 1928 with the Bordeaux 3-3-50 made with stone lime from Cutler Magner Co., Duluth, Minn.;

Bordeaux 3-4-50 made with high calcium hydrated lime, Limestone Products Co., Menominee, Mich.; Bordeaux 3-4-50 made with high magnesium hydrated lime, Western Lime and Cement Co., Milwaukee; liquid lime-sulphur 1.301 (34° Baume) from the Cream City Chemical Works, Milwaukee, and Kolotex, a dusting sulphur and lead arsenate compound, from the Niagara Sprayer Co., Middleport, N. Y. The high calcium hydrated lime went into suspension much more easily than the high magnesium lime as the latter had a tendency to "pebble," with the addition of water.

Lime Sulphur, Bordeaux, and Dust Compared

The relative effectiveness of the different sprays and dusts used was Bordeaux mixture, liquid lime-sulphur, and dust, respectively. This comparison was based on the per cent of leaves off and average number of fungus lesions per remaining leaf on September 17–19, 1928. The unsprayed showed 92% leaves off. When Bordeaux mixture, 3 applications was applied, 13%; lime sulphur (4 applications), 19%; lime sulphur (3 applications) followed by 1 application of Bordeaux mixture, 18%; dust (8 applications) 82%. The above figures were for Montmorency in the Sackett orchard, Sturgeon Bay, Wisconsin. The figures for early Richmond were less striking, but followed the same tendency. The number of leaves counted varied from 564 on one of the lime sulphur plots to 703 in one of the check plots.

The effectiveness of any spray is dependent on the time of its application as well as on its composition. This was strikingly brought out in the Montmorency sprayed plot. Where Bordeaux mixture was applied June 9 and June 21, 40% of the leaves were off on September 17–19. Where an additional spray was applied August 15 the per cent of leaves off on the same date was reduced to 13. On the Early Richmond the comparison was 25 and 18. In each case the unsprayed trees had lost 92% of their leaves.

Although Bordeaux mixture was found to be the more efficient spray for the control of the cherry leaf-spot, it has been found to reduce the weight of the fruits in many cases. Where lime-sulphur and Bordeaux mixture were used comparatively in 1928 the fruit from trees sprayed with lime-sulphur was heavier than that from trees sprayed with Bordeaux mixture. The increased weight of fruit from Montmorency trees sprayed with lime-sulphur over those sprayed with Bordeaux mixture was 1%, 6%, 11%, and 13% respectively in the Martin, Reynolds, Goldman and Sackett orchards. From trees of the Early Richmond variety the increased weights were 1% in Sackett orchard; 4% in Reynolds orchard; 6% in Martin orchard and 8% in Goldman orchard. The average increase in weight of fruit from trees sprayed with lime-sulphur over that of fruit sprayed with Bordeaux mixture has varied from 8% in 1928 to 16% in 1927, with an average of 12% for the past five years.

While the experiment has shown that considerably heavier fruit may be obtained in some instances where lime-sulphur is used instead of Bordeaux mixture, this increase may vary greatly in different orchards and in different years. The decision of which material to use must, therefore, be a matter for the individual grower. It must be borne in mind, however, that lime-sulphur should be handled with greater care than Bordeaux mixture.

Whereas three applications of Bordeaux mixture have given control of cherry leaf spot at least four applications of lime-sulphur have been necessary to secure the same results.

NOTES FROM NORTH DAKOTA

Sec. A. F. YEAGER

A new book published by the University of Minnesota press, Saint Paul, Minnesota, is "Trees and Shrubs of Minnesota" by Rosendall and Butters. The Price is $4.00 per copy.

Jerusalem Artichokes are being used for the production of levulose, a sugar sweeter than ordinary sugar. This sugar is prescribed by physicians for use by diabetics. Perhaps this troublesome weed will become a valuable cultivated plant.

We are asked whether Senator Dunlap and Progressive strawberries, if planted close together, will mix so as to produce inferior plants. No, they will not. If the vines run together you will have a mixture of plants but they will be either Progressive or Senator Dunlap plants, the same as though they had been grown alone.

It is possible new refrigeration methods for handling fruit will be in use in a few years. Tests in New Jersey show that where the air which contains oxygen is replaced by pure nitrogen by using tight containers fruit will keep a much longer time without spoiling.

Since putting out our note recommending the use of lime sulphur as a repellent to keep rabbits from girdling trees, we note there have been some careful experiments conducted which seem to show that the only positive way to prevent rabbit injury is either to kill the rabbits or use mechanical protection such as wire screen. Incidentally, how are your young trees faring these days?

"The Yellow Day Lilies" is the title of circular No. 142 of the U. S. Department of Agriculture. The day lilies include some of our hardiest perennials.

Best Varieties of Strawberries for Wisconsin

H. H. HARRIS,
Warrens, Wis.

YEARS ago, someone said, "God might have made a better berry than the strawberry, but He never did."

Considering the great number of new varieties being offered each year, we might easily imagine that someone is still looking for the berry that God might have made. If we had never tried some of the new introductions we would never have had any of the fine berries of the present day.

Which varieties shall we plant today? can only be answered in a general way.

If you simply wish to grow them for family use, probably the Dunlap or the Premier, or both would be satisfactory.

In Monroe County Wisconsin, at Sparta and Warrens, where strawberries are shipped through associations by the carload, Warfield and Dunlap have been grown more extensively than any other varieties now listed. Warfield is a pistillate variety and needs a perfect blossom variety as a companion to pollenize its blossoms and as the Dunlap can be picked in the same box, due to similarity, it is considered a good mate.

The Warfield's greatest failing is that it is affected by lack of moisture at fruiting time more than some other varieties especially when allowed to mat too thickly in the row. When carefully handled both of these varieties carry well and take well on the market.

For several years some growers at Sparta have grown Pocomoke. It is productive, but dull in color and does not stand up in shipping as well as Warfield and Dunlap. Gibson is much the same.

Premier is being grown more and more each year at Warrens.

Mr. H. H. Harris of Warrens, Wis. is one of the oldest strawberry growers in Wisconsin. One of his hobbies is to try out new varieties of berries and he has grown practically all the different kinds originated.

In this article he tells the varieties that he considers best to be grown by Wisconsin farmers and gardeners.

The main crop ripens earlier than the Warfield or Dunlap. It is a grand berry. Howard No. 17 is just as good, but if you have Premier you don't need it, for you probably couldn't tell them apart.

Other varieties grown for the past two years at Warrens are Beaver and Reynolds Special. The Beaver is well liked by some of the growers but I think it does not run as even in size as Dunlap, some being extra large and some long and slim like a mulberry. Plants set thick in the row and not as bright as Dunlap. The canning factory at Sparta much prefers this variety, and consequently a large acreage has been planted there during the past two seasons.

Reynolds Special is very late and a light colored berry. It does well on sandy soil but being so late most of the crop has to go to market by express as there are not enough late berries for carloads at the time they ripen. Several growers at both Sparta and Warrens are testing the new Wisconsin variety named Oshkosh. It is a grand plant maker. Can tell you more about its fruit qualities next summer.

We have a late variety by the name of Heritage, which gives us some large fancy berries for local market after most others are done fruiting. We have grown this nearly as long a time as we have the Dunlap (since 1900). We also have in our last spring setting several other June varieties on test.

Of the Everbearers we have Progressive, Champion and Mastodon. The first two mentioned are both fine berries. With plenty of moisture they will give you fruit from the first of August until hard freezing the same season set out. They are also the first berries for the table the next season but will not ripen as much fruit at a time in the autumn as the June varieties do in their season. The Mastodon we have only had two summers. The plants are large and slow to start summers and set fruit, and slower still to ripen. If you desire to grow the largest "Everbearer" berry —try the Mastodon. But if you want to be sure to have a good strawberry shortcake in August, set Progressive or Champion.

We have all of the varieties mentioned in this article in our fruiting bed (except Pocomoke and Reynolds Special) for 1929 and several others. (A little over three-fourths of an acre.) So if you attend the Wisconsin State Horticultural Society's Strawberry Day at Warrens next June, call at Oak Hill Farm, and see the different varieties in fruiting.

If you wish to test varieties not grown in your locality you can generally get 25 plants for 50¢ after they have been on the market for any length of time and that number is sufficient to tell how they show up.

One year is not long enough time to prove that the new is equal or better or worse than the old variety. Some varieties are good one year and almost worthless some other season. I believe in trying out the new. But set only a few until you are confident they are equal to the one you know.

Growing Squash

E. W. SULLIVAN,
Alma Center

THERE are about four tons of squash shown in the picture which grew on four rows about twenty rods long in my early potatoes.

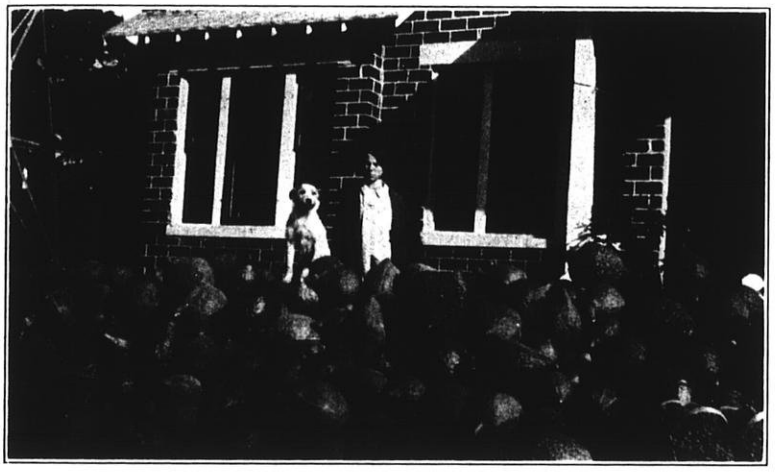
By planting them with the early potatoes, they do not require much extra land and in that way can be grown much cheaper. We skip every sixth or seventh row of potatoes when planting, and these rows are planted to squash. The potatoes are then dug first for early market and are out of the way in time for the squash to mature.

We use garden fertilizer around the squash hills as they need rich soil. We thin out all the hills to two plants.

Golden Hubbard and Delicious, which is a green hard squash, very thick meated and not too large, are our favorite varieties. The old Hubbard is a good squash for winter. The Chicago warted Hubbard is rather too large to be a good seller as people do not like to buy a large squash.

The best way to keep squash is to gather them before a heavy frost. They can then be kept in any building where they will not freeze, until cold weather. They can then be put in a dry room if it does not freeze and kept until March.

I have kept them upstairs over our kitchen in good shape all winter.



I sold the squash in the picture at $1.00 per hundred pounds. They were all gone by cold weather. Squashes will yield fifteen to twenty tons per acre and are a profitable crop to raise with us even to feed hogs. Hogs are very fond of them.

Squash need lots of room. A good row will cover a space twenty feet wide. I had vines last fall forty feet long with three or four squash on them.

STOCK VEGETABLES FOR WISCONSIN

The following varieties of Stock vegetables are recommended by Prof. E. J. Delwiche, Supt. of Northern Wisconsin Experiment Stations.

Mangel-Wurzel—Mammoth Long Red
Tankard—Golden Tankard
White Mangels—Half Sugar Mangels
Sugar Beets—(I would not recommend any special variety)
Turnips—The Aberdeen
Rutabagas—Monarch or American Purple Top
Carrots—Mastodon or White Vosges
Jerusalem Artichoke

"Why did you break your engagement with that school teacher?"

"I didn't show up one night, and she wanted me to bring a written excuse signed by my mother."—C. C. N. Y. Mercury.

We specialize in Regal Lilies

Wholesale and Retail

H. C. Christensen
1625 Ninth St.
Oshkosh, Wis.

KINKADE GARDEN TRACTOR
and Power Lawnmower
A Practical Proven Power Cultivator for Gardeners, Suburbanites, Truckers, Florists, Nurserymen, Fruit Growers, Country Estates and Poultrymen.

Catalog Free
AMERICAN FARM MACHINE CO.
1085-33rd Ave. S. E. MINNEAPOLIS, MINN.

HARDY FRUITS FLOWERS
And ORNAMENTALS
At Right Prices
They Grow and Please
Landscape Suggestions and Catalog on Request
STRAND'S NURSERY
Box 23, TAYLORS FALLS, MINN.

Let us supply the material to make your home a beauty spot.

We have a complete line of trees, plants, and shrubs for the garden, lawn and orchard.
THE COE, CONVERSE & EDWARDS CO.
FORT ATKINSON, WISCONSIN

Growing Apples in Western Wisconsin

FRED SACIA, Galesville

WE ARE slowed up in our orchard operations just now because of deep snow, so I am taking this opportunity of doing my bit by writing about the orchard conditions in western Wisconsin and at La Crescent, Minn. I have included La Crescent because apple buyers and others always make a stop there on their way from Gays Mills through Galesville and on to Chippewa Falls, Eau Claire, and Menomonie.

Of the dozen or so orchards in the Galesville district, our own is the last planted. The old orchards contain many old varieties which were in good demand locally a number of years ago. Western apples have almost entirely displaced them now. Growers have been shipping their crops, orchard run, culls pretty much included, into the Dakotas. Their Greenings and a few Wealthy go to Chicago.

These orchards are coming into the hands of the second generation and *they are replanting gradually with the better varieties.*

Orcharding with our neighbors is a side issue, while with us, it is our main issue with a small dairy on the side. Our original planting was a solid ten acre block of N. W. Greening. Fourteen years ago the remainder of our cleared land was planted to five thousand Delicious and one thousand King David. We had a wonderful stand for two years, then came a hard winter which killed out nearly half of our Delicious. We did not wish to take any more chances with Delicious on their own roots so replaced with Duchess with a bunch of Wealthy mixed in, of which we were unaware. With these, it seems there was nothing to it but the planting, for these trees have grown fine and borne several good crops. I have worked steadily the last ten years grafting and budding Delicious onto the Duchess and no one knows the patience and the work it has taken. I have gotten now to where I can plant a small tree of some hardy variety and bud it over to Delicious quite easily.

Part of the Sacia Orchard at Galesville.

Mr. Sacia is one of Wisconsin's large apple growers. In this article he tells how some of the problems of the fruit grower in western Wisconsin are overcome.

Mr. Sacia sent the editor several Delicious and Jonathan apples on Feb. 11. They were in splendid condition and their size and quality excellent.

Delicious in western Wisconsin thrive only at certain elevations and that is the middle half, say, of the distance from the level of the Mississippi to the top of the Bluffs. Our orchard is at that elevation so the bulk of our renewals are Delicious top-worked on Hibernal. We got our idea of topworking at La Crescent. Webster and Vollenweider have a few, some fifteen years old, that are hardy and have been bearing heavily. I usually make three or more trips to La Crescent yearly to see my orchard friends, and have come to know the Webster and Vollenweider orchards almost like our own.

Vollenweider had one of the most beautiful crops of Wealthy this year that it is possible to grow. He called me one morning when his crop was ready requesting me to get him some pickers. He excitedly reported that there was a buyer at Webster's and two more due, all on their way to his place. I immediately called a Chicago buyer. As I could get no other pickers to go, I took one of my sons and went to help Vollenweider for a few days. As we drove into his yard we found Henry, as you will come to know him, smiling. He had just closed with the buyers, who were still in the yard, for his whole crop, including culls, all excepting his winter apples. The buyers were about to be on their way to our place so I was acquainted with all the details of the deal. These buyers were Jewish and had an outlet for all grades of apples. They ultimately bought nearly everything from Gays Mills north to Menomonie.

Other buyers wanted only the best Wealthy and they wanted them badly. One of them pass-

ed the remark that this region excelled in the quality of its Wealthy. They could be distinguished on the market because of their color. I took the hint and had all the good Wealthy marked "Western Wis. Wealthy", and our Greenings marked "Wis. N. W. Greening". The result was that Wisconsin Greenings have been quoted for the first time on the Chicago market (See the "Packer").

I think the time will come when we commercial growers can get together and arrange for the growing of real Wealthy apples. Buyers as a general thing are interested in our Wealthy and Greening. They will not look sidewise at our Delicious, so we must figure on the Delicious going into local consumption.

Demand and prices for our crop were a bit better than usual this year because of the short crop east. All excepting the larger Greenings are packed in bushel baskets using the Perfection pack. We found that the plain facer lined with felt was much the best, especially for any size of facing apple, than the corrugated facer. Our best Wealthy brought $1.15 F.O. B., No. 1 Greenings $1.20 to $1.30. Delicious $2.00 and $2.25 for Fancy grade. These were cash prices at harvest time and are practically as good as for the Western apples extra fancy and in boxes.

We packed and sold fifteen cars this season, three of which were for other growers. Packing for others doesn't prove satisfactory because of the generally poor qualities of apples furnished. We haul our main crop a distance of three miles to town where the packing is done from a large pavilion close to the tracks. There is a distinct advantage in doing this because of the ease of getting help and having room for supplies. I had C. A. Dutton take charge of the packing and also the sale of the Greenings. This proved to be a wise move. Dutton was where he could keep in close touch with several buyers and the cars, as fast as they were packed, went to wherever we could get the best price. My own time is taken up in getting the apples out of the orchard. My oldest son gets them through to town and onto the cars. Everything works as smoothly as one could wish and we could handle an immense crop if we happen to have one.

Any time Wisconsin can, over a wide extent of territory, produce a good Jonathan, and a good Delicious in addition to McIntosh, Snow, and Wealthy, commercial apple growing will be assured. Jonathan in the Webster and Vollenweider orchards that are grafted on the Hibernal are producing heavy crops of large apples, really as fine as can be grown, and the tree appears to be as thrifty as one could wish. These apples have always sold for better than two dollars per bushel.

We found our own Jonathan in good demand at $2.00. Then there is the Delicious budded on the Baccata seeding. This may dwarf the Delicious enough to make it more generally hardy for Wisconsin. It is going to take a few years to make certain of all this and during this time the consuming public is sure to be larger, and the western orchards will have passed the peak of their bearing. As it takes twelve or fifteen years to bring an orchard into bearing, which is a long time, it may be the part of forethought for the more enthusiastic orchard men and those of the Horticultural Department to get into closer touch.

Some of the experiments have been slow in coming through to the grower. The Orchard division of *Wisconsin Horticulture* can well become the medium for promotion of the industry among the coming generation of orchardists. Possibly it will be well for the Horticultural Society to look there for the extension of its membership.

WISCONSIN RAPIDS GETS NEXT STATE POTATO SHOW

THE 1929 State Potato Show will be held at Wisconsin Rapids October 28-November 1, 1929. The Executive Committee of the State Potato Growers Association has completed all arrangements for holding the show.

The Wisconsin Potato Growers' Association was organized at Waupaca in 1912. Successful Potato Shows have been held in central and upper Wisconsin annually since that date.

One of the early and most successful Shows was held at Wisconsin Rapids in 1914. Since that date the Show has grown gradually and now actually constitutes a complete Exposition of the Wisconsin Potato Industry.

The Show as organized, involves complete competitive exhibit classes representing about 20 counties in the state. In addition to these competitive classes, the show features a complete commercial department, representing manufacturers of machinery equipment and potato growers' supplies.

Educational exhibits are installed representing State and Government Departments—Disease and Insect Control—Related Farm Crop Exhibits—Fertilization and Soil Improvement Methods—Potato Cooking Demonstrations — Seed Potato Inspection and Certification.

Friday of Convention Week is annually designated as "Rural School Day". Rural school students and teachers participate in programs, competitive judging contests and exhibits.

The Show receives the complete cooperation of Wisconsin Potato shipping interests, railroads, and manufacturers of potato growers' equipment and supplies, and as now organized is one of the largest Special Crop Expositions in the country.

J. G. MILWARD,
Secretary.

Free Plant Premiums

The plant premium offer closes APRIL 1st. Members who pay their membership fee before April 1st may select a premium—worth from 50¢ to $1.00 each. It will pay you to renew your membership at once, and tell your friends about this offer.

Remember—ANNUAL MEMBERS paying $1.00 membership fee to this society may receive a premium free—postpaid.

Local club or Society members, joining through such organizations should send 15¢ postage with their choice of premiums.

See the February issue of Wisconsin Horticulture for further information.

All premiums are donated by the growers. Send for their catalogs and buy plants and bulbs in Wisconsin.

WHITE ELM NURSERY COMPANY
Hartland, Wisconsin

100 Aquilegia, L. S. Hybrids
50 Asclepias Tuberosa
50 Gypsophila Paniculata
50 Gypsophila Repens
50 Heuchera
100 Platycodon
50 Phlox Sublata Pink
100 Arabis Alpina
50 Centaurea Macrocephala
50 Gypsophila Acutifolia
200 German Iris — named varieties, our selection
50 Limonium Latifolia
50 Phlox Pantheon
50 Phlox Sublata white
Premium: 3 plants

FLORIADALE GARDENS
Wm. R. Leonard, Ft. Atkinson, Wis.

Gladiolus Bulbs:
100 Alice Tiplady
100 Roanoke
50 White Butterfly
Premium: 5 bulbs

H. B. BLACKMAN, Richland Center, Wis.
Fruit Grower and Nurseryman

100 Latham Raspberry mosaic free stock
100 Gladiolus bulbs—named varieties
100 Strawberry plants — Premier or Minnehaha
Premium: 10 plants or bulbs, choice of two varieties

MENOMONIE-EAU CLAIRE NURSERIES, Inc., Menomonie, Wis.

500 Mixed Primulinus Glads
Premium: 10 bulbs
50 Assorted Dahlias
Premium: 4 roots

BAKER NURSERY AND SEED COMPANY
Fond du Lac, Wis.

500 Gypsophila (Baby's Breath)
Premium: 4 plants

THE NORTH STAR NURSERY CO.
Pardeeville, Wis.

50 Hydrangea Paniculata G 12–18"
50 Coralberry or Indian Currant 18–24"
Premium: 1 shrub, either variety

V. E. BRUBAKER, CHEQUAMEGON FLOWER GARDENS
Washburn, Wis.

500 Lupine plants
Premium: 5 strong plants

H. C. CHRISTENSEN
Oshkosh, Wis.

100 blooming size Regale lily bulbs
Premium: 2 bulbs
500 planting size Regale lily bulbs
Premium: 10 bulbs

COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.

500 German Iris, named varieties
Premium: 2 rhizomes
500 Gladiolus bulbs, named varieties
Premium: 4 bulbs

W. A. DANA, STONECREST GARDENS
Eau Claire, Wis.

1,000 blooming size gladiolus bulbs
Premium: 6 bulbs, 2 each of 3 varieties
Varieties: Le Marshal Foch, light pink; E. J. Shaylor, rose pink; A. B. Kunderd, cream pink ruffled; Carmen Sylvia, best white; Jewell, salmon and yellow; Salmon Beauty, salmon; Crimson Glow, bright red; 1910 Rose, light rose pink; Los Angeles, shrimp pink; Mr. Mark, blue; Pink Wonder, large light pink; Dorothy Wheeler, choice pink.

JOHN F. HAUSER, SUPERIOR VIEW FARM
Bayfield, Wis.

Delphiniums and Shasta Daisies, strong one year old plants
Premium: 10 plants

DAHLBERG NURSERIES
Ladysmith, Wis.

50 Spirea Van Houtte—2–3 feet
Premium: 1 plant

SWARTZ NURSERY
Kenosha, Wis.

100 Excelsior climbing roses
Premium: 1 plant
100 Spiraea Vanhoutte
Premium: 1 plant

J. T. FITCHETT, FITCHETT DAHLIA GARDENS
Janesville, Wis.

100 Dahlias
Special: 1st 50 orders may have "Bashful Giant", largest Dahlia, retail value $1.00
Balance: Choice of one 75c variety or one 50c and one 25c, or three 25c varieties

McKAY NURSERY COMPANY
Madison, Wis.

200 two year, No. 1 Concord Grapes
Premium: 2 plants

AMERICAN FORESTRY COMPANY
Pembine, Wis.

1,000 American Arbor Vitae, size—18 to 24 inches
Premium: 2 trees

RASMUSSEN'S FRUIT FARM AND NURSERY
Oshkosh, Wis.

Choice of any plants listed in catalog to value of $1.00
Package, 1 doz. each, Oshkosh Strawberry plants
French Delphiniums
Premium: 1 package

W. A. SISSON OF SISSON'S PEONIES
Rosendale, Wis.

100 peony roots, named varieties
Premium: Choice of one $1.00 root
100 iris, named varieties

W. A. TOOLE, GARRY-NEE-DULE
Baraboo, Wis.

150 Delphiniums, blue hybrids
100 Delphiniums, Belladonna
50 Phlox Siebold
50 Phlox Rheinlander
50 Phlox Miss Lingard
100 Canterbury Bells
50 Aquilegias, long spurred hybrids
100 Shasta Daisies
50 Coreopsis lanceolata
50 Gaillardia grandiflora
50 Oriental Poppy
50 Platycodon
50 Pyrethrum roseum
Premium: Choice of 3 plants

Send direct to grower for price list in case you wish additional plants or bulbs.

Books on Fruit, Flowers and Vegetables Loaned Free

MISS MARGARET RUFSVOLD

BELOW is a list of books added to the Traveling Library Department, Wisconsin Free Library Commission, Madison, since the publication of the lists in the *Wisconsin Horticulture*, April, May, and June 1927 numbers.

To borrow these books by mail apply to the Traveling Library Department, Wisconsin Free Library Commission, Capitol Annex, Madison. The loan period is for three weeks with postage prepaid. Those who live in cities maintaining public libraries should apply to their local library, others should write direct to the Traveling Library Department.

FRUIT AND FRUIT GROWING

The banana, by P. K. Reynolds. ©1927.
Bush fruit production, by R. A. Van Meter. ©1928.
Bush-fruits, by F. W. Card. New and modified edition. ©1925.
Horticulture, by K. C. Davis. 4th edition enlarged. ©1927.
Muskmelon production, by J. W. Lloyd. ©1928.
Orcharding, by V. R. Gardner and others. ©1927.
The pear and its culture, by H. B. Turkey. ©1928.

VEGETABLE GARDENING

Manual of vegetable garden diseases, by Charles Chupp. 1925.
Truck crop plants, by H. A. Jones. 1928.
Vegetable gardening, by A. J. Macself. n. d.

FLOWER GARDENS

American greenhouse construction, heating and equipment, by R. T. Muller. ©1927.
American orchid culture, by E. A. White. 1927.
Beginner's garden, by Mrs. L. (Y.) King. ©1927.
The book of bulbs, by F. F. Rockwell. ©1927.
English flower garden and home grounds, by William Robinson. 1926.
The flower garden day by day, by Mrs. L. (Y.) King. ©1927.
Flowers for every garden, by Mrs. L. (C.) Bush-Brown. ©1927.
Garden lover, by L. H. Bailey. ©1928.
Gardens, by Mrs. J. (G.) Cosgrave. ©1925.
Gladiolus, by F. F. Rockwell. 1927.
Gladiolus book, by F. T. McLean and others. ©1927.
Home flower-growing, by E. C. Volz. ©1928.
House beautiful gardening manual. ©1926.
The Iris, by J. C. Wister. ©1927.
Iris in the little garden, by Mrs. E. P. McKinney. ©1927.
Irises, by F. F. Rockwell. ©1928.
Japanese flower arrangement, by Mary Averill. ©1913.
Lillies and their culture in North America, by W. N. Craig. ©1928.
My wild flower garden, by Margaret Durand. ©1927.
Principles of flower arrangement, by E. A. White. ©1923.
Spring flowering bulbs, by C. L. Thayer. ©1928.
Spring in the little garden, by F. E. McIlvaine. 1928.
Studies in gardening, by Arthur Clutton-Brock. ©1916.
Water lilies, by H. S. Conrad. 1907.

LANDSCAPE GARDENING

Formal design in landscape architecture, by F. A. Waugh. ©1927.
Foundation planting, by L. H. Johnson. ©1927.
Parks, by L. H. Weir. ©1928.
The small place; its landscape architecture, by Elsa Rehmann. 1918.

DISEASES AND PESTS

Manual for spraying, by K. L. Cockerham. 1923.
Spraying, dusting and fumigation of plants, by A. F. Mason. ©1928.

TREES AND FORESTRY

Book of shrubs, by A. C. Hottes. ©1928.
Care of ornamental trees, by C. F. Greeves-Carpenter. ©1928.
Cultivation of shrubs, by K. M. P. Cloud. ©1927.
Check list of the forest trees of the U. S. by G. B. Sudworth. U. S. Department of Agriculture. 1927.
Evergreens for the small place, by F. F. Rockwell. ©1928.
Flowering trees and shrubs, by A. J. Macself. 1925 .
Hardy evergreens, by F. A. Schrepfer. ©1928.
Hardy shrubs, by F. A. Waugh. ©1928.
Manual of cultivated trees and shrubs, by Alfred Rehder. ©1927.
Shrubs for amateurs, by W. J. Bean. 1924.

GARDEN CLUB CHAMPION

WILLIAM HAWTHORNE Jr. entered 4 H Club Work in the spring of 1924, aged 11 years.

In the 5 years he has won 50 premiums: 17 1sts; 11 2nds; 19 3rds; 2 4th; 1 5th prizes.

He has been on four demonstration teams, giving 11 public demonstrations.

He won the Milwaukee Garden Championship in 1927.

He has won the Scholarship to the One Week Short Course given by the University of Wisconsin for two summers.

In 1925 he was judged second best State Garden Club Member.

The first 4 years he cleared a profit of $83.00 on his garden of about 30 ft. square in the back yard. The past summer he rented some land, 36 ft. by 200 ft. one mile from his home. From this plot he sold $124.00 worth of produce.

The total value of his winnings are:

Cash prize money	$80.00
Value of his trips	50.00
Wheel Hoe given by the county	20.00
Total profits made	207.00
Total for 5 years	357.00

This year he wins both County and State Garden Championships.

When asked how he did it, he replied, "I just set my aim high, and then worked for it. If I did not get it one year, I tried harder the next."

F. B. COON,
West Allis.

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S. H. S., Madison, Wis.
Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

OUR COVER PICTURE

Wisconsin's State Capitol, whose dome is the second highest in the U. S., as it looks in winter. Photo courtesy Wisconsin Farmer.

"Earthworms as Pests and Otherwise" is the title of Farmers Bulletin No. 1569. This bulletin tells what good earthworms do, what damage they do, the different kinds of earthworms, how they may be killed and how they may be fattened up as fish worms.

Ambassadur is the finest Iris grown, according to the vote of the members of the American Iris Society.

ADDITION TO HORTICULTURE BUILDING AT STATE FAIR

FOR the past ten years there has been a demand on the part of fruit, flower and vegetable exhibitors at the State Fair for an addition to the present Horticulture Building.

For a number of years many of the exhibits have been housed in a tent at the rear of the building and in some years there were so many exhibits that some of them had to be put up underneath the tables due to lack of exhibit space.

This year the State Fair Board and the State Department of Agriculture recommended an appropriation for an addition of approximately 64 feet long to be built at the rear of the building which is 72 feet wide. This addition will take care of the needs for some years to come.

Commissioner of Agriculture, Walter A. Duffy, presented the State Fair budget to the joint Finance Committee of the Legislature during the last week in February and very strongly urged the appropriation for the addition to the Horticulture Building. Commissioner Duffy has shown himself very much in sympathy with the needs of the horticulturists of the state.

WAUKESHA FARMERS SEEK RELIEF FROM RABBIT INJURY TO FRUIT TREES

THE following resolution was unanimously adopted at a meeting of the representatives of ten spray rings of Waukesha County held in Waukesha February 12, 1929.

Whereas, rabbits are causing a great deal of damage to fruit trees and shrubbery, and

Whereas, farmers do not at all times have the right to exterminate rabbits while suffering this loss,

Be it therefore resolved, that the Conservation Commission be requested to issue permits on application to any farmer having over fifteen fruit trees to hunt or kill rabbits on his property at any time by any means available, including the use of ferrets.

ORCHARD SPRAY PROGRAM CHART READY

THE Wisconsin Farm Orchard Spray Chart published by this Society is now ready for distribution. It consists of five three colored cuts showing the proper stages at which the fruit should be sprayed. Opposite each cut is a statement of the disease controlled, the kind of spray to use, and other directions.

Last year this was sent out with the magazine so that a great many of our members now have the chart. We shall be glad to send one of these charts free of charge, however, to any member who sends in a request.

The following County Agents have purchased charts from us and will distribute them to their growers:

J. F. Thomas, Waukesha; W. S. Comings, Whitehall; Reed Austin, Crandon; B. F. Rusy, Sturgeon Bay; S. P. Murat, Alma; Ray Pallett, Wauwatosa; Geo. W. Lord, Florence; H. R. Lathrope, Kewaunee.

CONVENTION REPORT SENT FREE

THE Society still has on hand several hundred copies of the combined reports of the conventions held at Green Bay in 1926 and at Madison in 1927.

This report contains articles of interest to all of our members. For fruit growers there are important papers by Professor R. H. Roberts, Mr. H. W. Ullsperger, Mr. Fred Randau of Iowa on Apple Cave Storage, also articles by Professor J. W. Keitt, Mr. J. E. Leverich, Professor V. R. Gardner of Michigan, articles on raspberries, strawberries, flowers and bulbs.

We will be glad to send a copy free to any member on request.

NEW DISCOVERIES IN HORTICULTURE

"WHAT'S New in Farm Science" is the title of the latest bulletin issued by the director of the Wisconsin Agricultural Experiment Station, covering the work of all branches of the Experiment Station for the past year.

It is a bulletin that many of our horticulturists will find valuable and may be had by writing to the Agricultural Experiment Station, University of Wisconsin, Madison.

The following are a few of the important items contained in the bulletin:

Cabbage Club Root Prevented by Hydrated Lime

Club root of cabbage has been a serious problem in many of the cabbage growing sections. Mr. F. L. Wellman and Dr. Walker discovered that ground limestone, air-slaked lime, burnt lime and gypsum did not give satisfactory control of the disease. Hydrated lime, on the other hand, proved very effective. Applications of one to two tons to the acre resulted in a full crop of cabbage, while on untreated soil almost a total loss was sustained.

Lack of space prevents us from giving more of the items contained in the bulletin this month but they will be mentioned in succeeding issues.

Some of the titles however, are as follows: "Frost Proof" Southern Cabbage Plants Frequently Carry Black Rot; Aster Diseases Can Be Controlled; Organic Mercury Disinfectants Tested in Potato Disease Control; Apple Scab Epidemics Require Special Control Measures; Rain Causes Dissemination of Fire Blight; Brown Rot Blights Cherry Blossoms in Rainy Seasons; One Cause of "Hairy-root" in Nursery Stock Isolated; Crowngall on Raspberry Shown to be Transmitted by Bacteria.

A NATIONAL FLOWER

The Columbine is Highly Favored

THERE has been considerable discussion relative to the selection of a national flower, but the arguments advanced in favor of the Columbine by the president of the Ormond, Florida, Garden Club are the best we have seen. These were included in an article on the subject appearing in the February issue of the Minnesota Horticulturist.

1—"Its very name suggests Columbia and is from the Latin word, Colombo, meaning Dove, symbolic of the Dove of Peace. It is said to derive the name from the fact that one view of the flower resembles a group of doves.

2—The botanical name Aquilegia which is connected with the Latin, Aquila, an eagle, was so named because the flower, reversed, with the spurs hanging down, suggests an eagle's talons; thus we have the thought of an American eagle, our own American eagle, emblematic of fearless power.

3—The Columbine is in brilliant red, white and blue, our American colors.

4—The leaf terminates in thirteen lobes, the number of the stripes in our American Flag, also the number of the original states in the Union.

5—Each separate petal of the short spurred variety is a perfect miniature of the Liberty Cap.

6—A view of the long spurred variety presents a definite outline of the Horn of Plenty, an American emblem of our National wealth.

7—A further feature is the five-pointed star which the full face of the flower presents, emblematic of the stars in our Flag.

8—It grows in nearly every state in the Union from the Atlantic to the Pacific, and from Canada to the Gulf.

9—Many great artists, Giotto Van der Goes, Roesselli, Sodoma, Luini, and Van Eyck used the Columbine to symbolize the highest religious ideals in their paintings, considering its form extremely artistic.

10—It is in bloom on three of our holidays—Memorial Day, Flag Day, and Independence Day.

11—It is graceful, hardy and dignified, a fitting emblem to represent our Nation."

Address letters of endorsement to Paul F. Hannah, Assistant Editor of Nature Magazine, 1214 Sixteenth St. N. W., Washington, D. C.

HORTICULTURAL PROGRAM DURING FARMERS WEEK

IN SPITE of the fact that only one morning session was devoted to horticulture during annual "Farmers Week" at the College of Agriculture the first week in February a very good crowd attended. A number of fruit growers traveled across the state for the meeting. Mr. Fred Sacia and Mr. W. D. Young, commercial growers of Galesville, Mr. W. H. Lawrence of Sturgeon Bay and Mr. J. J. McKenna of Gays Mills traveled the greatest distance.

So interested did the growers become in the program that they voted to continue the meeting during the afternoon.

It goes to show there is considerable interest in horticulture throughout the state.

A vote was taken asking for a complete program for next year. The State Horticultural Society offered its cooperation in putting this across.

Four days could well be devoted to tree fruits, small fruits and vegetables.

Professor J. G. Moore is making plans to have separate sessions for amateurs and garden club members next year. The State Garden Club Federation will no doubt be glad to assist in these meetings.

About the Home and Garden

MRS. C. E. STRONG, Editor 80th and George St., West Allis

TO HIM THAT WILLS—WAYS ARE NOT WANTING

I HAVE been thinking of the Garden Club whose hearts desire is planting and making beautiful the bare little yards of the country schools. And then I thought, and thought again, of the many really beautiful small trees and shrubs that are native to Wisconsin and can be had for the asking—and the digging.

The common Chokecherry, during its blossoming time, a period of about two weeks, is very beautiful and fragrant. When the fruit is ripe there is a feast for the birds. It grows rapidly and does well on even poor soils.

There is the wild Crabapple, even Mr. Jensen grows poetical over the beauties of this small tree. Also the wild Plum, how we all exclaim over a thicket in bloom as we drive past. Can you think of any cultivated tree blooming at the same time that is more attractive than the Shad or June berry, with its drifts of white blossoms?

If the Elder berry was an imported shrub at a high price we would mourn our inability to purchase. Yet, it grows every where. The red Elder is another attractive shrub seen growing in the waste places so to speak. The Dogwood with its attractive blossoms and its brilliant red branches during the winter, the wild Gooseberry and Currant, Sumac and Wild Roses; what a thicket to delight the eye of every passer by; what a snug retreat for the birds; what an education for the children of the schools, the learning to recognize the beauty that is about them.

If a start were made, enthusiasm aroused, teachers, children and parents be encouraged to help in the work, soon even a dilatory County Board would want to have the right to point with pride to "Our Unusual County School Yard Plantings".

I remember a little country school yard in Michigan, where the children brought Ferns, Violets, Hepaticas, all the treasures of the woods and meadows, planting them in the long bed under the trees that the "teacher" and some of the older children had dug up. Those small children are now sending other small children to school, but the Ferns and wild flowers are growing and blooming beneath the trees still, many more in fact—for they have increased. There are some trees also that the children planted with much ceremony and help from that same nature loving "teacher". These special trees and the wild flower bed, set apart this little schoolyard from many others, and to this day the children say, "That's Miss Josie's tree, and so is that one—and over there is her flower bed—and she left them to us, for always.

Flowers of the field, of the woodland, the meadow.
Stars of the Hillside, or gems of the glade—
Modest in purity: Glowing with brightness,
In the rich folds of the rainbow arrayed.
Called into life by the kiss of the sunshine,
How your warm hues scatter gladness and cheer:
And from your hearts, lo, the perfumes of Eden
Coyly diffuse on the scent laden air.
(Selected.)

We have American gardens, English, French, Italian, Dutch and Japanese gardens—But has any one ever heard of a Bolshevik garden? We know of no type of garden that breeds unrest. Those who work with Nature find Contentment. (Taken from an old copy of the Gardeners Chronicle.)

(Editors note) In moving trees and shrubs it is necessary to have a permit, according to State Law, on account of disease. The State entomologist is very willing to cooperate, however, and will grant permits and make inspections on request. White pine and black currants may not be moved in this state. Requests for permits should be mailed to E. L. Chambers, State Capitol Annex, Madison Wis.

JUST A FEW REMINDERS

If you enjoy seeing the birds about the home in the spring, put out food.

It is rather hard for them to find enough to eat in the cold stormy weather we are so apt to have after the birds arrive.

A feeding tray with scraps and crumbs is a welcome sight to those early arrivals.

Have you looked over the seed lists and ordered what you will need for your garden? Some times that delay in ordering means disappointment later on, for either the particular seeds you have wanted most are all sold—or, there are so many other orders ahead of yours, that you get a late start. ORDER EARLY.

Your tree, shrub and plant orders, are they in the hands of the nurseryman? Well—The nurseryman is only human, he is quite liable to send the best of his stock to those folks who have their orders in when he starts sending out. He isn't a mind reader—he does not know your valued order is coming until it reaches him.

Dear Mrs. Strong: Time to report progress, isn't it, as soon, in spite of snow, ice and zero temperatures now, we shall soon be at work outdoors. I have been quite a shut-in these cold weeks, but the radio for ears and window blossoms for eyes, make the time go fast.

I have two Cyclamen bulbs from seed, which have been a joy all winter; one a bright dark red—the other a waxy white with rose colored center—very large blossoms.

Last Mothers' Day one of our daughters and her husband gave me a large bush of a pink tea rose, the old fashioned monthly rose. The bush was so large that I felt it must winter in the cellar, as window room could not be spared for it, but for fear of losing it, I took three slips from it in October and two of them rooted and are beautiful little bushes, both budded, one just opening. These, with begonias of several varieties, coleus, Star of Bethlehem, "Baby tears," budded petunias, scarlet salvia blossoms, make indoors very pleasant, in spite of lack of sunshine this winter.

No sign of bud on Amaryllis from seed yet, but plant is growing vigorously, so I still hope.

Truly yours,
ALURA COLLINS HOLLISTER,
Mukwonago, Wis.

I believe that people who have windows filled with plants during the winter months, look on the bright side of life. They are so interested in the flowers they forget to grumble about the weather.

Come again, Mrs. Hollister, we are always glad to hear from you and your flowers; my seedling Amaryllis has also shown no signs of bud—but hope springs eternal in the flower lovers heart.

Dear Mrs. Strong: I have been reading Wisconsin Horticulture for several years and enjoy every bit of it; But have "specially" enjoyed your page because of the personal note. Some day I hope to have a garden again, at present I am just a busy woman whose flowers must grow in the greenhouses of the florist. I should, perhaps have gone on just enjoying the Magazine if it had not been for the dear little poem. I just had to tell you that there is a Memory Garden for me also, that I can understand your constant plea for more gardens for children, and that I am very confident that your dreams will come true. People are waking up to the fact that a garden to play in is a very necessary part of the equipment in bringing up children. Dream on. Work on.

Sincerely,
M. J.
Kenosha, Wis.

Thank you. C. E. S.

Dear Mrs. Strong. I like "Myself" and the Garden Book. I keep a book also—only I call it, Garden Experiences. Last season I visioned a part of my garden in blue and yellow, I had

Grow Your Own!

What can be more delicious than FRESH FRUIT on the table every day? Our PLANTERS GUIDE AND CATALOG tells how you can grow your own and save money.

Send for your copy to-day. Its free.

NORTH STAR NURSERY COMPANY
Box A-56 Pardeeville, Wis.

Farmer Brand Seeds Grow

THERE are new tested varieties listed in our 1929 Catalog which may double and triple your crop income. See this wonderful new book before you buy a seed. 80 big pages, handsomely illustrated, and describing all of our northern-grown, purebred Grains, Seed Corn, Clovers, Alfalfa, Vegetables, Flowers, Berry Bushes and Fruit Trees. Farmer Brand Seeds are guaranteed 99% pure. Remember we sell at low, direct-from-grower prices; a big saving for you! Mail the coupon!

Farmer Seed & Nursery Co.
100 First Ave. Faribault, Minn.

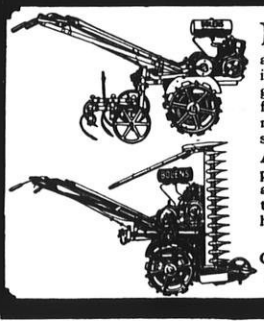
Farmer Seed & Nursery Co.
150 First Ave. Faribault, Minn.

Please send me your free 1929 Seed Catalog. I am interested in:

☐ Clovers ☐ Alfalfa ☐ Garden Seeds
☐ Seed Grains ☐ Flower Seeds
☐ Seed Corn ☐ Nursery Stock

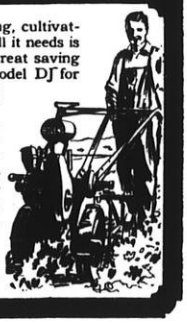
Name.....
Town.....
State..... R.F.D.....

BOLENS Tractors for Small Farms and Gardens



MOTORIZE your garden plowing, harrowing, seeding, cultivating, spraying, lawn mowing and field mowing. All it needs is a guiding hand. Gasoline power does the work with great saving in time and energy. BOLENS is built in two sizes, model DJ for gardeners, florists, estates and others—a light machine for extremely accurate work. Model IQ with heavier motor, two speed drive and gear shift—for suburbanites, small farmers, poultry men, bee keepers, nurserymen, etc.

All BOLENS tractors have vital and distinctive features—patented high arched axle for clearance and vision, a simple and natural tool control, double clutch drive with power turn, an instant hitch for quick change of implements, off set handles and other advantages. Thousands already in use.



Write today for complete catalog and time payment plan.

GILSON MANUFACTURING CO.
881 PARK ST. PORT WASHINGTON, WIS.

glimpsed a bed in those colors the previous season and it pleased me.

Cynoglossum Amabile and lemon African Marigolds were my choice and I ordered the seed. I started Cynoglossum A. early but for some reason the few that came up did not thrive and eventually died; then my brother took the remainder of the seed and raised five sturdy plants. I took three and how they grew out in the sun where other plants would not. Two began blooming in July and were so truly a fulfillment of catalog description that I wanted to take them to the flower show of August tenth, but alas when that date came those two were past and the third had not arrived.

The African Marigolds grew rank and tall but their bloom came after the Cynoglossum had bloomed and gone—so my vision of blue and yellow didn't materialize. However I made the acquaintance of a charming flower, but when it seeded I discovered we have its sister or its first cousin in the Beggars lice of our obnoxious weeds.

Sorry I can not send any pictures of my garden—those I had taken were not suitable for Horticulture. Good Luck to you.

Sincerely,
MRS. ROBERT ONISH,
Mukwonago, Wis.

Sorry that vision didn't materialize, but try again. The Cynoglossum is a splendid cut flower, lasting well in water, it is also good for the plants to cut the blossoms as they continue to bloom the whole season.

Try growing the Cheiranthus Allioni with it, starting the plants quite early, or the summer Chrysanthemums such as the variety Morning Star.

Thank you for the good wishes and be sure to come again.

A TRUE HORTICULTURIST

We have a letter from Mrs. L. H. Palmer, Baraboo, Wisconsin, in which she says:

"I received in my mail today, the February issue of Wisconsin Horticulture. It was like a visit from an old friend. It has been a long time since I have had the pleasure of being numbered among the fortunate ones. I get very homesick as spring advances and can only watch others plant, sow, or gather the products of the soil."

Mrs. Palmer has retired from the farm and is now living in the city of Baraboo but as is so often the case, the love of growing things lingers on.

PLANTING EVERGREENS

MR. SIMON Maloney manager of the American Forestry Company of Pembine, large growers of evergreens in northern Wisconsin, gives us the following directions for transplanting evergreen trees.

"In the handling of evergreen trees, never allow the roots to become dry. Their sap is resinous and once hardened, no amount of moisture will dissolve it. Take the bundle of trees with earth moss and string intact and dip the entire ball in a thin mixture of clay and water and leave there until ready to plant. Cover this ball with two inches of earth.

Water should be added while planting and the trees should be watered copiously once each week putting on twelve quarts or more. Allow the water to soak down until it is all gone and then work the ground thoroughly to the depth of two inches. Continue this treatment about once every seven days until the trees become established. In case of a draught, the trees should at all times be well cultivated and kept free from grass and weeds."

TRY OUR SPECIAL SELECTED SWEET SCENTED HYBRID LUPINES

One Dozen $3.90 post paid

We specialize in Perennials

Send for our new illustrated catalog

Chequamegon Flower Gardens

V. E. Brubaker, Prop.
Washburn, Wis.

OSHKOSH SOCIETY ELECTS OFFICERS

THE February meeting of the Oshkosh Horticultural society was held at the Oshkosh public museum. As the January session had been omitted owing to the stormy weather, the annual election of officers took place at this time.

John Geiger was elected president; H. C. Christensen, vice-president; and Miss Florence Winchester, secretary-treasurer.

Reports of the winter meeting at Milwaukee, held Dec. 5, 6 and 7, were given by Mr. Geiger and Mr. Christensen. An invitation has been extended to the state society to hold its next year's meeting at Oshkosh.

In the informal discussion that followed, N. A. Rasmussen mentioned the great amount of damage being done to fruit trees by mice and rabbits. Owing to the heavy snow, the mice burrow through and girdle the trees at the roots, and the rabbits are able to reach the branches from the deep snow banks and eat the buds from the trees. The most effective method against this destruction is by stamping the snow down hard around the base of the trees, and in a wider circle to keep the rabbits from reaching the branches.

Mr. and Mrs. Talbot invited the members to be their guests at the next meeting, the first Monday in March, at which time the annual oyster supper will be held.

AIMS OF THE SOCIETY

(Continued from page 198)

through the establishment of a Horticultural Machinery Exhibit in connection with our annual convention. I am sure this would be an added drawing card to our convention and is worthy of your earnest consideration. Several of these recommendations I made last year and I have again mentioned them this year because I think them of importance to this society.

General Condition of the Society

Last year I reported that it had been my privilege to serve with four different secretaries of this society. At the time of our last convention our present secretary, Mr. H. J. Rahmlow, had been with us for only a month. However, my statement that I considered we were very fortunate in securing his services appears to be true, and I am happy to again report at this time that he has more than fulfilled our expectations, and is worthy of all the confidence we placed in him at that time. The general condition of the society proves that point. He has at all times been ready to cooperate with the Board of Managers and Executive Committee; besides possessing a real initiative and a knowledge of the needs for the betterment of the society.

In conclusion I want so say that my administration has been a pleasant one. Harmony has prevailed at all times. There naturally has been some criticism, which I have always welcomed. I have always worked on the theory that honest criticism and suggestions build up any organization. And I must add they have been a big help to this one. I can truthfully say that I have had the helpful cooperation and undivided support of all, and I wish to thank Vice President Telfer, Secretary Rahmlow, the members of the Executive Committee, the Horticultural Department of the University, and all members of this society for the assistance and support given me during my administration. All have served willingly and well, and it is my earnest wish that future officers of this society will be given like support.

POWER

BEAN ORCHARD AND CROP SPRAYERS

BEAN "Simplicity"
Capacity of 6 gallons per minute at 250 pounds pressure, sufficient to do good work with a spray gun or supply 2 rods. With or without truck.

BEAN "Super Giant"
A real giant for work. Capacity up to 23 gallons a minute at 300-400 pounds pressure. For large acreages and where very rapid high pressure work is required.

BEAN "All Purpose"
Designed for potatoes and other truck crops, but quickly converted into an orchard sprayer. Adjustable to rows of any width.

There's power aplenty in a BEAN Power Sprayer. Power for speedy work. Power for thoro work. Power to insure full-rated capacity—and more. Power to break up the spray into the finest mist and drive it onto the trees at tremendous pressure.

Every BEAN rig has reserve horse power in the engine—and every outfit is equipped with the powerful slow-speed BEAN Pump. Timken Tapered Roller Bearings thruout. Big over-size steel shafts. Heavy wide eccentrics instead of cranks. Extra wide gears.

Heavy guides to keep the plungers true with the cylinder wall and end wear and friction. Indestructible porcelain-lined cylinders. And many other features that insure an abundance of power, utmost ruggedness, low-cost operation, and long-life. Send the coupon.

JOHN BEAN MFG. CO.
(Formerly Bean Spray Pump Co.) W. H.
Hosmer St., Lansing, Mich. W. Julian St., San Jose, Calif.
Please send me your 1929 Sprayer Catalog.

*No. of acres*_____ *Kind of fruit*_____

*Name*_____

*Address*_____

State Garden Club Federation News

MRS. R. L. MALISCH, President, Hales Corners
MRS. C. W. VAUGHN, Vice-president, Madison
MRS. A. W. SPERBER, Sec'y–Treasurer, Hales Corners

FEDERATION NOTES BY THE PRESIDENT

If you contemplate planting wild flowers in your garden this spring, be sure you have the right soil conditions for them. Certain acid loving plants like Trailing Arbutus (Epigaea repens), Moccasin Flower (Cypripedium—different varieties), Wintergreen (Gaultheria procumbens) and the Pitcher Plant (Sarracenia purpurea) would languish hopelessly in any other than an acid soil.

Perhaps you are planning a new garden or adding to your old garden. It would be a good idea to take pictures before you plant it and after it is completed. These pictures are interesting in years to come.

If we beautify just one little corner of this big earth, we have accomplished something worth while.

This is the month to study your catalogs and order your seeds. Try something new this year.

According to the American Home magazine, Mr. George H. Jackson of Hobokus, N. J., recently won first prize in a contest for the most beautiful garden within a radius of fifty miles of New York City. Mr. Jackson said: "My work was inspired by suggestions and helps derived through garden club activities where I have met such enthusiastic gardeners."

His grounds have been visited by many garden clubs and his work has inspired many persons to attain higher ideals in pretty gardens.

NOTICE TO FEDERATION MEMBERS

THIS is the last month in which you can get free plant premiums for membership as listed in the front part of this magazine.

Members of garden clubs whose membership is renewed before April 1st should send their choice of plant premiums together with 15¢ postage at once to the State Horticultural Society, Washington Building, Madison, in order not to miss out on this opportunity.

THE GARDEN CLUB MOVEMENT

Mr. James H. Burdett, director of the National Garden Bureau, makes this statement in regard to garden clubs.

"The fastest growing civic movement is the garden club movement. The best attended shows are the garden shows. The American public is becoming garden conscious and is beginning to demand in its outdoor home surroundings the same high standard of beauty and good order it has achieved indoors."

LETTER FROM THE FEDERATION SECRETARY

ANOTHER snow and wind storm. My tree peonies were completely covered with snow and had just started to pop through when this last storm arrived and completely covered them again and they are supposed to have nice fat buds in the month of February.

It is hard to realize when one looks out of the window and sees the vast expanse of snow that spring is just around the corner. When it does come, I suppose it will just pop up and say "Here I am" without the least bit of warning. Then we will have to rush and hurry and possibly not have half time enough to do the things we had planned for this year. So even if it does take a little will power and concentration now is the time to draw your plans, order your seeds and have your garden tools all ready so that with the first breath of spring you will be all ready to start.

Another thing, while we are waiting for the warm days. Do you know of any community near you or somewhere in the state that hasn't a garden club? Won't you write and tell us about them and we will be only too glad to help them organize if they wish us to. Or if you know of any garden clubs that have not joined the Wisconsin Federation of Garden Clubs and just don't know what it is all about we will be glad to explain the advantages that may be had by joining. You also become a member of the State Horticultural Society.

If you have any problems or desire information the Wisconsin Federation of Garden Clubs will do all it can to help you.

MRS. A. W. SPERBER,
Secretary-Treasurer.

NOTES

The flower show season will soon be here. Every garden club in Wisconsin should have two or more flower shows this summer.

Recently a well informed exhibitor remarked that our flower shows could be greatly improved by more care and knowledge on the part of the exhibitors, in the art of flower arrangement.

A meeting or two devoted to talks, demonstrations, or book reports on flower arrangement will be of much value.

The Michigan Agricultural College, East Lansing, has a very fine bulletin entitled "Use of Cut Flowers", by Alex Laurie, suitable for this work. A good book is "Principles of Flower Arrangement" by White.

Books may be obtained from the Free Traveling Library Commission, State Capitol Annex, Madison, if not available locally.

Which will make the best impression upon the flower show visitor—100 vases of flowers put up without consideration to harmony of color or proportion in arrangement, or 50 vases with flowers tastefully displayed?

A suggestion may be to offer more prizes for the best arranged vase of many of the important varieties.

Branches of spring flowering shrubs may be forced into bloom now by bringing them indoors. Pussy willows, Japanese barberry, wild plum, flowering almond and Japanese Quince and others will make a fine display.

The Wisconsin Garden Club Federation is the 17th federation to be organized in the United States.

The native hemlock (Tsuga Canadensis) is considered one of the best evergreen hedge materials for the northeastern states, according to Robert R. Lewis, in "Horticulture".

It is hardy and easily transplanted and may be held, year after year, at any desired height. It is almost certain death to trim a specimen the year it is transplanted, according to Mr. Lewis.

The following is a list of the garden clubs or horticultural societies, whose work is along garden club lines, in Wisconsin.

This list is the best one available but there may be other clubs in the state not mentioned here. We would appreciate getting the names of any other clubs in Wisconsin.

Beloit Garden Club
Delafield Garden Club
Eau Claire Garden Club
Elkhorn Garden Club
Hales Corners Garden Club
Hillcrest Garden Club
Janesville Garden Club
Kenosha Horticultural Society
Lake Geneva Garden Club
Madison Garden Club
Milwaukee County Horticultural Society
Oshkosh Horticultural Society
Pewaukee Garden Club
Pierce County Horticultural Society
Racine Garden Club
Spring Valley Horticultural Society
Sum-Mer-Del Garden Club
Superior Garden Club
Waukesha Town Garden Club
West Allis Garden Club

FORM NEW GARDEN CLUB IN WEST ALLIS

EVEN a temperature of 10 degrees below zero did not discourage ambitious gardeners who met at the home of Mrs. Hohberg 877—79th Ave. for the purpose of forming a Garden Club. The Hillcrest Garden Club, with a membership of twenty elected a President, Mrs. H. Hohberg, and Secretary-Treasurer, Mrs. G. A. Leverenz, 918—75th Ave. They voted to join the newly organized State Federation of Garden clubs and the Wisconsin Horticultural Society, and considered themselves well on the way towards being a full fledged Garden Club.

GLADIOLUS
CHOICE VARIETIES

50 bulbs 1" up, or 100, ½" to 1", or 250 under ½" or 1,000 bulblets, at least 20 varieties, labeled, for $2.00.

Fine mixed, large flowering, or primulinus: 50, 1" up, or 100, ½" to 1", or 250 under ½" or 1 pint bulblets for $1.00. All prepaid.

HARRY F. MEREDITH
Box 483 Union Grove, Wis.

Dahlias—Gladiolus—Perennials
4 good Dahlias (named, labeled) ..... $.75
100 Gladiolus (1 inch, assorted) 1.00
1 doz. perennials (assorted, labeled) 1.25
Or, entire list above, postpaid for 2.25
May we send you our price list?
DEWALT'S FLAMBEAU RIVER GARDENS
Ladysmith, Wisconsin

Send $1.00 for
1 Mt. Ash, 7 ft., or
4 Bridal Wreath 2–3 ft.
DAHLBERG NURSERIES
Ladysmith, Wis.

Olds' Seeds

4 New Vegetables
Golden Sunshine Sweet Corn. 7 to 10 days earlier than Golden Bantam. Pkt. 15c.
Progress Pea. A splendid new, early, large-pod dwarf pea. Pkt. 15c.
Longfellow Cucumber. Longest and smoothest. Dark green, very productive. Pkt. 15c.
Marglobe Tomato. Large, smooth, pure scarlet, wilt and rust resistant. The leader in new tomatoes. Pkt. 15c.
Order any one of the above 4 varieties and we will include a 15-cent packet of the new Harris Early Giant Pepper, without charge, if you mention this paper.
42nd Annual Catalog
A 96-page illustrated book of Field, Garden and Flower Seeds, including Bulbs, Plants, Shrubs and Trees. Tools, Fertilizers, Insecticides, Poultry Supplies, etc. Ask for a copy.
L. L. OLDS SEED CO.
Drawer 6 Madison, Wis.

One of the aims of the new Garden Club is to aid in the work of children's gardens.

The next meeting will be held the 1st Monday in February at the home of Mrs. G. A. Leverenz when the Misses Geolser's of Oakwood will talk on Hybridizing, Budding and Grafting.

RACINE CLUB DISCUSSES ROCK GARDENS

ROCK gardening was the subject of an interesting and instructive talk given at the meeting of the Racine Garden club on Tuesday evening at the public library by Mrs. Arthur Jaeger of North Milwaukee.

Mrs. Jaeger gave many valuable suggestions in the making and planting of this fascinating form of garden. She said that after the rock garden is once made, it requires very little care. The hardest work is in getting the rocks placed in the ground in such a way that pockets of soil are formed for the plantings, and to look as natural as possible. Once made, the rock garden will never need fertilizer and even the labor of weeding is less than in other gardens.

She gave lists of flowers to plant in shady rock gardens, and lists for sunny ones, all plants easily grown and to form a succession of bloom from early spring until late fall. Uneven and hilly ground is most suitable for rock gardens and many times a rock wall solves the problem of a terrace. The thing most important in making a rock wall is to build it on a slight incline so that the plants on the lower part of the wall will receive moisture as well as the higher ones.

The meeting was very well attended, and at a short business session it was voted that the club join the Wisconsin Federation of Garden Clubs, which is part of the State Horticultural society, with which the Garden club is already affiliated.

The next meeting was announced for Tuesday evening, Feb. 19, when Mrs. Hitz of Nashotah will talk on flower shows.—Racine Journal News.

HILLCREST CLUB HAS GOOD PROGRAM

Mrs. GEO. LEVERENZ, Sec'y

THE Hillcrest Garden Club of West Allis met at the home of Mrs. Leverenz Monday February 4th. The meeting was called to order by the President, Mrs. Hohberg.

Mrs. Park, chairman of the Program committee reported that Mrs. Brown and Mrs. Hyatt would assist her, and that the program for the next two meetings would be on "Annuals". March 4th there will be a round table discussion on the proper way to sow annuals led by Mrs. Strong. Each member is to bring a question.

The Secretary read a letter from the West Allis Garden Club wishing them success. The club instructed the Secretary to thank their sister club for its good wishes.

Seven new members joined the Club.

The roll was called, each member responding with her favorite flower and "Why".

Miss Gelzer of Oakwood gave a very interesting demonstration and talk on grafting. Some of the members brought twigs and took lessons, so we may expect some wonderful things in our gardens this summer.

Mrs. Malisch, Mrs. Sperber and Mrs. Paul of the Hales Corners Garden Club, who were anxious to hear Miss Gelzer, were our guests. Meeting adjourned until March 4th at the home of Mrs. Fleisher, 893 79th Ave.

"Where are you going with that red lantern?"

"Oh, I just found it. Some careless fellow left it beside a hole in the road."

SUM-MER-DEL MEETING

Mrs. M. M. DAY

THE February meeting of the Sum-Mer-Del Garden Club was held at the home of Mrs. Hewit Jacques of Delafield.

After the usual order of business a revision of the constitution was read and after some discussion adopted.

Mrs. Le Roy Henze of Menomonee Falls was elected secretary to take the place of Mrs. Charles Smythe of Delafield, resigning.

The program opened with a calendar outline for February garden activities prepared by Mrs. Day. Mrs. Henze then gave a most instructive and delightful talk on "The Gardens of Versailles" assisted by Mrs. Rogers who showed many beautiful pictures of the gardens from her collection.

Under the able direction of Miss Helen Moore the club has begun a course in wild flower study and at every meeting each member will be given a set of pictures of wild flowers with descriptive material.

Some useful hints on feeding birds were given by Mrs. Holt. Mrs. Hitz, chairman of the program committee, announced that she would have with her at every meeting a question box in which members could deposit questions about garden problems, which would be answered at the following meeting.

The club then adjourned and Mrs. Jacques invited the members to the dining room where dainty refreshments were served.

MADISON GARDEN CLUB NOTES

FRED BODENSTEIN, John Riner, and Fred Wilcox were appointed a committee of three to meet with R. W. Bardwell, superintendent of schools, in an effort to secure a full time teacher to instruct Madison school children in gardening this spring, at the February meeting of the Madison Garden

club in the Y. W. C. A. If the instructor is secured, the club plans to sponsor a school childrens' garden contest this summer with a flower and vegetable show in the fall.

Plans for landscaping a triangular section of land near camp Randall on which is one of the oldest maple trees in Madison, were discussed by Mrs. J. A. Reed, a member of the club's civic improvement committee. Mrs. Reed stated that a tablet giving the history of the land and the ancient tree probably would be placed on the grounds following the landscaping. This is the first of a series of civic improvements to be undertaken by the club.

Fred Bodenstein made a brief tribute to Abraham Lincoln in a Lincoln program which followed reports.

The club will meet on March 12.

PIERCE COUNTY SOCIETY WILL PROMOTE SCHOOL AND HOME BEAUTIFICATION

Mrs. ALVIN D. HURTGEN

THE Pierce County Horticultural Society held its February meeting at the Public Library rooms in the Village Hall February 2nd. A nice sunny day brought out not only the proverbial ground hog but also a good attendance.

The club decided to pool orders for roses and other shrubbery, also perennials, plants and bulbs so as to take advantage of club rates and a good discount for early orders.

We also decided to try out some new varieties of lilies.

One of our members gave a talk at the Farmers Institute held at Spring Valley the 18th and 19th of February.

A series of articles is being published in the county papers on gardening and 300 bulletins on Home Beautification are to be distributed through this territory to prepare the farmers

FERTILIZED PASTURES
cut the feed bill

RECENT investigations of pasture fertilization in this country and abroad show that top-dressing pasture land several times a year with a nitrogen fertilizer results in earlier grass, more luxurious growth, longer grazing periods *and grass richer in digestible protein.*

Protein is the most important—and the most expensive—ingredient in dairy feeding. Cows pastured on grasses rich in protein yield more and richer milk, and there is a welcome saving in the feed bill. Young stock makes better growth in less time.

Top-dressing good pasture land with Arcadian Sulphate of Ammonia increases the protein content and the yields of pasture grasses. Try it for yourself. Top-dress an acre of your best pasture land early—a month before turning-out time—with 100 to 150 lbs. of Arcadian Sulphate and watch the results.

ARCADIAN
Reg. U.S. Pat. Off
Sulphate of Ammonia

The Barrett Company

AMMONIA-BENZOL DEPARTMENT
Agricultural Bureau

Atlanta, Ga. Memphis, Tenn. Norfolk, Va. — New York, N. Y. — Cleveland, Ohio San Francisco, Cal. Toronto, Ont.

Free Sample

We'll send you—FREE—enough Arcadian Sulphate of Ammonia to fertilize 25 sq. ft. of soil. We will also send you free bulletins telling how best to use Arcadian. Just fill in the coupon and mail it—today!

The Barrett Company (address nearest office) G-4-29

Please send me sample package of Arcadian Sulphate of Ammonia. I am especially interested in.....
(Write names of crops on line above)
and wish you to send me bulletins on these subjects.

Name.....

Address.....

KINDLY PRINT NAME AND ADDRESS

for the Home Beautification Contest which will be staged this coming year.

A contest to beautify the country school yards by planting will also be carried on during the summer. Prizes will be given for children's gardens.

PEWAUKEE CLUB FAVORS PINK PETUNIA

Mrs. JOHN ROSSBACH, Sec'y

THE Pewaukee Garden Club, a new club recently started with a membership of about twenty-five families, has chosen a club flower.

The Pink Petunia has been the favored flower and each member is asked to plant at least a few of these flowers in a prominent place. The public places cared for by the club will also show this Pink Petunia.

A very successful card party held by the club last October will help defray the expense of the public flower beds.

The meetings are held at the home of some member the first Friday of the month.

PROGRAM ON DAHLIAS AT MILWAUKEE SOCIETY MEETING

FAY B. COON, Secretary Pro Tem

THE regular meeting of the Milwaukee County Horticulture Society was opened by Pres. Huron H. Smith in the chair. Mr. F. B. Coon was appointed secretary pro tem. Minutes of the previous meeting were read and approved. Mr. Smith gave us a message from our Secretary and said that it might be necessary to elect a new secretary to fill the vacancy until Miss Krienitz was able to return.

The matter of joining the State Garden Club Federation came up for discussion. Mr. L. Potter moved, seconded by Mrs. Haasch, that the Milwaukee County Horticultural Society join the State Garden Club Federation. Motion passed.

Mrs. Louis E. Levi read the Nature Poem, "Plant a Tree", by Lucy Larcum.

Iris being the topic for the next February meeting, the following program was announced:

1. Iris varieties, Bulbless, Japs and Dwarfs.
   Mr. Gutknecht.
2. Iris varieties, Siberian, German and Spanish.
   Mrs. Klingbeil.
3. Treatment upon receipt.
   Mrs. Ruegg.
4. Fertilization and Soil Preparation.
   Miss Celia Dix.
5. Planting and Dividing.
   Mr. L. Potter.
6. Insects and Diseases and their Control.
   Mr. L. Burmeister.

Mr. Smith placed an interesting collection of Dahlia catalogs and new Garden books on the table and suggested that we look them over after the meeting.

The evening program centered about Dahlias and their culture. Because of bad weather and sickness, Mrs. Strong and Mr. H. Koch were not able to take their places on the program.

Mr. E. C. Haasch gave a very interesting discussion of the history of the dahlia and then told of his method of planting and handling his dahlias. He emphasized that dahlias are root crops and so need similar mellow soil conditions as do potatoes. Heavy clay soil may be made to grow dahlias if mixed with plenty of coarse sand or coal ashes. The plants must have a very mellow soil for proper root and bulb growth. He described his method of disbudding for flowers.

Mrs. Klingbeil followed by explaining the method she uses to cut the tubers for planting. She also uses cuttings from the young plants to start new ones.

"Use the hoe more and the hose less", was the plea of Mr. Gutknecht in explaining how he fertilizes and cares for his soil. His talk carried conviction for it was based on his rich experience.

"If you want lots of flowers, do not prune too much; but for large sized flowers, prune and disbud quite freely", said Dr. Nolte in his talk on Pruning, Shaping and Cutting Dahlias. He emphasized that we must arrange for air circulation through the leaves and plants. Pruning should start early and be carried on constantly through the season. By proper care the plants will pass through the hot season without stunting.

Next followed a symposium on best varieties. By common consent the following list was selected as best suited to Milwaukee County.

Show Dahlias

Maude Adams	Arabella
Bronze Beauty	Dreer White
Jamaica	Dutchess
Charles Lanier	Lavonia
Imperial	

Cactus

Ballet Girl	Rene Ceyeou
Golden West	Margaret Bouchon
Sulfer Queen	California Beauty

Cactus, Hybrids

Rollo Boy	George Walters
Daddy Butler	Esther Holmes
Ethel Smith	F. W. Fellows
Gladys Sherwood	California

Peony

King Albert	Meyerbeer
Mrs. E. M. Earle	Gorgeous
Miss Wisconsin	Rosalie Styles
Queen Wilhelmina	

Decorative

Mrs. Margaret Woodrow Wilson	
Sagamore	Mrs. Schneppert
Millionaire	Oliver Warner
Jersey Beauty	Amun Ra
Pride of California	Merrick
Margaret Masson	Bashful Giant
Eleanor Martin	Judge Marian

Pompoms

Tony Kieth — Purple Beauty
Belle of Springfield — Gretchen Heine

Collerettes

Revoire

Single

Koerner's White — W. W. Brown
Mondscheible — Benedictus

Mr. Roman Bozykowski, representing Mr. Greenhaugen, a commercial dahlia grower of Hartford, gave us a very valuable discussion of quantity growing of dahlias. He described their methods of storing the roots, cutting and shipping the roots in the spring. He told of the field culture and pruning. He explained how the market demands for cut flowers influenced the kinds of plants and the methods of pruning for market flowers. They cut the blooms at night and store in deep cold water over night before packing for the shipment.

This closed a very interesting and profitable evening. As Pres. Smith expressed it; "A man would have to read a great many books before he could learn all that was told at this meeting, for this came from the rich experience of dahlia growers.

(Editors Note) Lack of space prevents us from publishing the interesting papers on Dahlias read at the meeting, this month. They will appear in an early issue.

TABLE OF CONTENTS

Chicago Garden and Flower Show ---------- 195
Aims of the Society ---------- 197
Beautifiers for Girls ---------- 199
North Dakota Notes ---------- 201
Cherry Leaf Spot Control ---------- 200
Best Varieties of Strawberries ---------- 202
Growing Squash ---------- 203
Apples in Western Wisconsin ---------- 204
State Potato Show ---------- 205
Plant Premiums ---------- 206
Books Loaned Free ---------- 207
Editorials ---------- 208
About the Home and Garden ---------- 210
Planting Evergreens ---------- 212
Garden Club Federation ---------- 214
Do We Need Inspectors ---------- 220

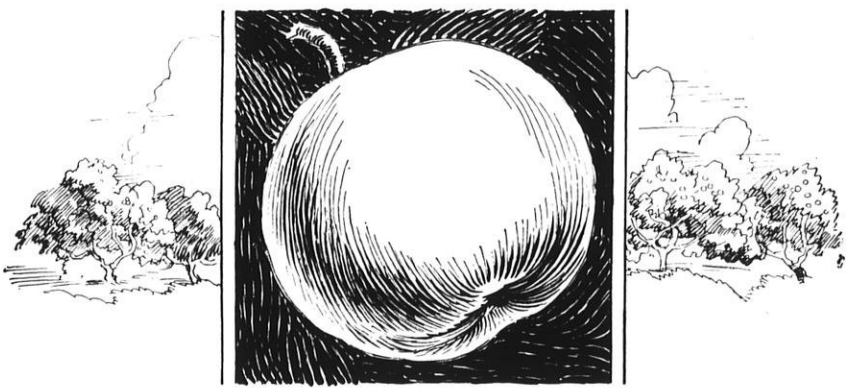
The National Peony Show will be held in Washington, D. C., this year and in Duluth, Minnesota in 1930.

In a letter from the Waukesha Town Garden club, Miss Mary Gibson Secretary-Treasurer writes: "You will be interested to know that on Monday evening, February 11th we had a meeting at which time we decided to join the State Garden Club Federation.

At the meeting above mentioned, the following officers were elected:

President—Mr. H. S. Snow
1st Vice-president—Mrs. J. C. Atkin
2nd Vice-president—Mr. E. B. Stillman
Secretary-Treasurer—Miss Mary Gibson

WILL YOUR HARVEST BE "FANCY" FRUIT?



Every Spraying Counts

FOR PEACHES: At Blossom time spray your peach trees with "Dritomic" Sulphur or with "Fungi" Dust. It will pay you in protecting against brown rot losses.

FOR APPLES: Now's the time to control scab. Get rid of last year's hang-over infection first. Plow under the fallen leaves as soon as the weather permits. Then—when the new leaves are mouse-ear size—give the orchard a thorough spraying with "Orchard Brand" Oil Emulsion or Bordeaux Mixture. Next the cluster-bud application—equally important as the means of preventing scabby fruit.

Have you a 1929 copy of "Cash Crops?"

Ask us to send one.

STANDARDIZE ON "ORCHARD BRAND"

ARSENATE OF LEAD — CALCIUM ARSENATE — ARSENITE OF ZINC
DRITOMIC SULPHUR — BORDEAUX MIXTURE — FUNGI DUST
A S P DUST — 85—15 DUST — 90—10 DUST

Quality fruit commands a readier market and a higher price!

GENERAL CHEMICAL COMPANY
40 Rector Street, New York
St. Louis Los Angeles San Francisco

GCI-68

ORCHARD BRAND
REG. U.S. PAT. OFF.
SPRAY & DUST MATERIALS

Do We Need Inspectors?

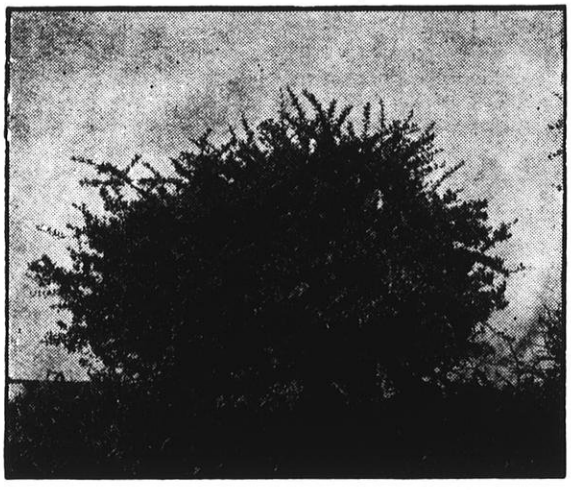
Why Certain Plants Can Not Be Shipped Into Wisconsin

NOEL F. THOMPSON
State Division of Entomology

RECENTLY a federal inspector, working in one of the railroad distribution points, opened a package containing plants shipped from a town in Oregon to an address in Milwaukee, Wisconsin. As required by Oregon and by Wisconsin, this package had attached to it a tag certifying that the content was nursery stock, which had been officially inspected and found free from insect pests and plant diseases. So far as the inspector could see, there were neither insect pests nor dangerous plant diseases, but the plants were held as a prohibited shipment and the shipper was made liable to federal prosecution. The plants were *Mahonia aquifolium* or Oregon grape.

The Oregon grape is an attractive plant. Its yellow flowers, blue berries and evergreen leaves make it valuable as an ornamental. On the Pacific coast, where it is native, it is used extensively and it has found favor in the east as well. It has, however, one disadvantage. It belongs to the genus Mahonia, which is by some botanists considered a part of Berberis and in common with many of the Barberries it is susceptible to the Black Stem Rust Fungus, and Black Stem Rust, as everyone knows, is the "grain farmers worst enemy." At least this is true in the North Central part of the United States and in parts of Canada. Therefore, since the Oregon grape is subject to Black Stem Rust and since this rust has been serious in Wisconsin, the planting of the Oregon grape in Wisconsin is prohibited. Anyone attempting to ship such a plant into Wisconsin makes himself subject to prosecution by the state, and if the shipment comes from out of the barberry eradication area, which includes thirteen states, he is liable to federal prosecution.

The regulations of the federal Plant Quarantine and Control Administration, and of the various states in regard to inspection and movement of plants, affect all of us who are interested in plants. Whether we buy or sell, or merely give away or exchange plants, we are subject to the various provisions of these laws. At times they may seem petty and vexatious, but they are not so intended, and a little study will usually reveal a sound basis and need for the rules.



A Japanese Barberry. It is Harmless

The underlying principle back of all the rules and regulations is the control of injurious insects and plant diseases. The balance between plants, insects and diseases, which nature had established through generations has become greatly disturbed by our modern civilization in its needs and wants. Where once corn grew safely and luxuriantly, now the European Corn Borer reigns supreme. Where, but a few generations ago, the Colorado Potato Beetle was content to eke out a meagre existance on the native plants of the west, now we plant thousands of acres of potatoes for him to feed upon.

The early settler in Wisconsin was not troubled with crown gall of raspberries, apple scab, club rot of cabbage, late blight of potatoes, San Jose scale, Colorado potato beetles, tobacco wild fire and many other injurious insects and diseases with which the modern home owner, horticulturist and farmer has to contend. These are all immigrants allowed to enter our state. The annual cost of combating them and other introduced diseases and insects is enormous. Part of the cost is paid by the grower in spraying and treating expenses. Total or partial loss of the crop and death of the plants must also be considered, and the home gardener whose sweet peas and asters fail entirely contributes a part.

Possibly no law or regulation could have prevented the entry into the state of all these pests, but the entry of some could have been greatly delayed and the wide distribution within the state could have been hindered or prevented. The federal authorities through the Plant

Quarantine and Control Administration are doing much to prevent further undesirable introductions, and the state regulations and their administration are being made more rigid and effective. In the last analysis, however, it is only by the intelligent cooperation of the public that lasting results can be secured.

If you intend to plant nursery stock, make sure that the plants have been inspected and that they are not prohibited or undesirable in Wisconsin. If you secure your plants from a regular nurseryman, he will usually attend to this, but if you secure the plants from a friend, it is advisable first to correspond with the State Entomologist at Madison.

Referring again to the barberry law, the Wisconsin state law prohibits the growing of any variety of Berberis or Mahonia susceptible to Black Stem Rust. There are about one hundred species and nearly as many more varieties of these plants in the United States. Over one hundred of them are known to be susceptible to this disease. The Japanese barberry, *Berberis thunbergii,* and the red leaved Japanese barberry, *B. thunbergii atropurpurea,* are not susceptible to Black Stem Rust and are perfectly safe to plant. So, also, is *Mahonia repens,* the low or trailing form of the Oregon grape, immune to the rust.

It is impracticable to print the complete list of barberries here, and if it were printed it would in most cases be lost before it was needed, but this and much other information in regard to the movement of plants is available at or through the office of the State Entomologist.

INDEX TO ADVERTISERS

	Page
American Farm Machine Co.	203
American Forestry Co.	194–222
Bahr Nursery	222
Baker Nursery	194
Barrett Company	217
Bean Sprayer	213
Beaver, Jeff & Sons	222
Beier, Chas. J.	194
Bolens Tractor	211
Chequamegon Gardens	212
Christensen, H. C.	203–222
Cleeremans Hatchery	222
Coe, Converse & Edwards Co.	203
Columbia Gardens	194
Cream City Chemical Co.	224
Cumberland Fruit Pkg. Co.	221
Dahlberg Nursery	215
Dewalt's Gardens	215
Evergreen Nursery Co.	221
Excelsior Nursery	194
Farmer Seed & Nursery Co.	211
Far North Gardens	194
Fitchett Dahlia Gardens	222
Floriadale Gardens	194
Gelbke, C. A. & Sons	222
General Chemical Co.	219
Gifford, F. R. Co.	223
Hauser, J. F.	221
Hecklinger, Fred	194
Jensen, John	222
Joelson, Mrs. Alfred	194
Jung Seed Co., J. W.	194
Lowe, John N.	222
Maloney Bros. Nursery	223
McKay Nursery Co.	223
Meredith, Harry F.	215
North Star Nursery Co.	211
Moser, Theron M.	194
Olds Seed Company	215
Palmer, Lew	222
Pease, Mrs. V. S.	222
Rasmussen's Nurseries	223
Russell, A. B.	194
Sheboygan Fruit Pkg. Co.	224
Sisson's Peonies	222
Standard Engine Co.	221
Stonecrest Gardens	194
Strands Nursery	203–222
Swedberg Bros. Nursery	194
Terrell's Aquatic Farms	194–222
Toole, W. A.	224
Waterloo Floral Gardens	221
White Elm Nursery	223

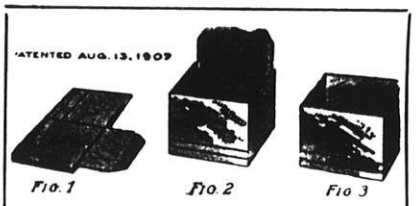


Fig. 1 Fig. 2 Fig 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

STANDARD GARDEN TRACTOR

Plows Seeds Cultivates Mows Hay and Lawns

A Powerful Tractor for Small Farms. Gardeners, Florists, Nurseries, fruits Growers and Poultrymen
DOES 4 MEN'S WORK
Walking and Riding Equipment.
Does Belt Work.

Free Catalog.
STANDARD ENGINE COMPANY
3241 Como Ave. Minneapolis, Minn.

CHRISTMAS TREE PLANTATIONS

Get in on the ground floor for the huge Christmas tree market that is rapidly developing.

GROW CHRISTMAS TREES—THERE IS MONEY IN IT!

Write for complete information and prices on suitable stock.

EVERGREEN NURSERY

Established 1864 **Sturgeon Bay, Wis.**

WATERLOO FLORAL GARDENS
QUALITY GLADS

100 choice blooming size Gladiolus bulbs, for $2.00.
FOB cash with order for 10 each, 10 varieties.
30 No. 1 bulbs, Ex. Mixed, $1.25

WATERLOO FLORAL GARDENS
Eugene B. Porter, Prop.
Waterloo **Wisconsin**

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

SHRUBS — ORNAMENTALS — ASPARAGUS Plants. West Park Nursery, C. A. Gelbke and Sons, Appleton, Wis.

TREE AND SHRUB SEEDS FOR sale. Many varieties. Write for price lists and planting directions and how to grow trees from seeds. Early orders will be appreciated. American Forestry Company, Pembine, Wisconsin.

NURSERY STOCK—SHRUBS

NURSERY STOCK FOR SALE. American Arbor Vitae, many sizes at reasonable prices. Send for large lists and planting directions. Order early for spring time planting. American Forestry Co., Pembine, Wisconsin.

FOR SALE: NURSERY STOCK. FRUIT and ornamental trees. Shrubs and perennials. Send for list. Bahr Nursery, Manitowoc, Wis.

APPLE SEEDS—Fresh and clean. Will sell while supply lasts at $1.00 per lb. American Forestry Co., Pembine, Wis.

LILY BULBS

REGAL LILIES. Nice blooming bulbs $2.00 per doz. Extra large size $3.25 per doz. Post paid. H. C. Christensen, 1625 Ninth St., Oshkosh, Wis.

WATER LILIES, ORNAMENTAL Water Plants, Berry-bearing shrubs and Plants for attracting birds, etc. Write Terrell's Aquatic Farm, 1006 W. Blk., Oshkosh, Wis.

STRAWBERRY PLANTS

25 MASTODON STRAWBERRIES OR Latham Raspberries. Postpaid $1.00. 4 Evergreens, Trees, Shrubs or Vines $1.00. Landscape suggestions and catalog on request. Strand's Nursery, Box 23, Taylors Falls, Minn.

STRAWBERRY PLANTS FOR SALE— Dr. Burrill, Dunlap, Warfield and Reynold's Special. $4.50 per 1,000; .55 per 100. Beavers, $8.00 per 1,000; $1.00 per 100. All plants government inspected and raised on new land. Order now. John Jensen, Warrens, Wis. Phone: Tomah AA740.

OUR CHICKS PAY

LEEREMAN'S
Quality Accredited
HICKS
Are Money Makers. Place your order with us and decide for yourself.
CLEEREMAN'S HATCHERY
Green Bay, Wis. R2J
Life Member W. S. H. S.

STRAWBERRY PLANTS — PREMIER, Beaver, Champion, Everbearing. Jeff Beaver & Sons, Eau Claire, Wis.

DAHLIAS

GIANT DECORATIVE DAHLIAS, Miss Primrose Variety, six feet tall, wonderful producers, my only specialty,—Mrs. V. S. Pease, 1403 Ash Street, Baraboo, Wisconsin.

RASPBERRY PLANTS

FOR SALE—CUMBERLAND BLACK raspberry plants, double inspected stock. $3.50 per hundred. Lew Palmer, Route 1, Box 5, Baraboo, Wis.

DELPHINIUM SEED FROM THE BEST English (Wrexhams) and American Hybrids. Liberal packets, $1.00. Half packets, fifty cents. John N. Lowe, Marquette, Michigan.

We aim to grow

Good Dahlias

Bulbs that will produce in your garden blooms as good as—or better than—you saw in our garden or at our various exhibits last fall. Catalogue on request. Early orders accompanied by cash receive a special premium.

Fitchett Dahlia Gardens
735 E. Milton Avenue
JANESVILLE, WISCONSIN

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

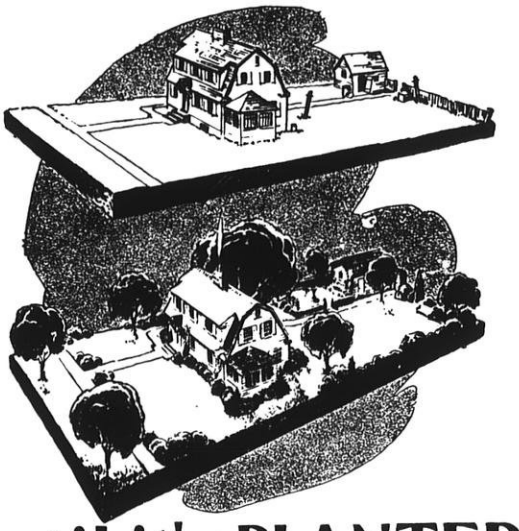
Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

It's not a Home-



until it's PLANTED

Before you buy write for our booklet suggestions on beautifying your home grounds!

McKAY NURSERY COMPANY

Offices: Madison, Wis.
Nurseries: Waterloo, Wis.

WISCONSIN'S GREATEST NURSERY

SPRAY MATERIALS
Lime sulphur solution
Lead arsenate
Dendrol

PRUNING TOOLS
Saws Shears
Pole Pruners

FERTILIZER AND LIME SPREADERS
Nitrate of Soda
Sulphate of Ammonia
Mixed Fertilizers
Geyer End Gate Spreaders

F. R. GIFFORD CO.
2201 University Ave. Madison, Wis.

White Elm Nursery Co.
Hartland, Wisconsin
General Line of
Ornamentals and Fruits

Dependable—

That is a quality we constantly strive for; we want every customer to feel confident that his orders will be cared for in a dependable manner, and that the plants he receives will be of highest quality and absolutely true to name and description.

We grow a complete line of fruit and shade trees, ornamental shrubs, perennials, climbing vines, berry plants, etc. consisting of the best varieties.

—Catalog on Request—

Visitors Always Welcome

RASMUSSEN'S
FRUIT FARM AND NURSERIES
Oshkosh Wisconsin

MALONEYS

Specialize in Cherry, Peach and inspected Apple Trees

Big Assortment of Shrubs, Roses, Flowers, Berries

Write For Our Big Free Catalog

Maloney Bros. Nursery Co., Inc.
DANSVILLE NEW YORK

Berry Boxes and Crates

Either made up or in the K. D., American Quart Berry Baskets, Climax Grape and Peach Basket, Till or Repacking Baskets, Plant Boxes and Veneer Tree Protectors.

Circular and Price List mailed upon request.

Write for special prices on carload lots.

Liberal discounts on early order.

Sheboygan Fruit Box Company
Sheboygan, Wis.

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which described as well as dozens of Hardy Perendainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

Use The Highest Quality

LIME SULPHUR

33° Beaume Solution, For Best Results

Made in Wisconsin

Prepared from the choicest raw materials
and
Priced to serve Wisconsin Growers best

Manufactured By

Cream City Chemical Works

766-774 Kinnickinnic Avenue **Milwaukee, Wis.**

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

Vol. XIX APRIL, 1929 No. 8

Latham Raspberry Plants
State Inspected
$2.50 per 100 $20.00 per 1,000
Free from mosaic and other diseases

Strawberry Plants
Senator Dunlap; Premier
100 ..... $ .75
1,000 ..... $ 5.00
Progressive
100 ..... $ 1.25
1,000 ..... $10.00
Mastodon
100 ..... $ 2.00
Order Early
FRED HECKLINGER
Route 7 Menomonie, Wis.
Phone 520-W

BARGAINS

100 finest Gladiolus Bulbs $2.00 F. O. B. or $2.25 postpaid, 10 varieties 10 each. Spring delivery.

30 popular Iris roots, 5 each 6 kinds for $2.25. Postpaid April—July—August delivery.

6 Peony roots, 2 red, 2 white, 2 pink for $3.00 postpaid. Sept.—Oct. delivery.

STONECREST GARDENS
Eau Claire, Wis.
Send for catalog. It's free.

GLADIOLUS BULBS ASSORTED
Per 100
Large size $2.00
Medium size 1.00
Small size ..... .50
Bulblets, per quart 1.50
THERON M. MOSER
Richland Center, Wis.

STRAWBERRY PLANTS

	Per 100	1000
Premier	$ .80	$6.50
Minnehaha	.80	6.50
Minn. 999	.80	6.50
Sen Dunlap	.75	6.00
Warfield	.75	6.00

Cash with order, please
State Inspected—Free From Disease
MRS. ALFRED JOELSON
R 1 Chetek, Wis.

Excelsior Nursery
CHAS. HARALSON
Wayzata, Minn.
Growers of Minnesota new fruits and other hardy nursery stock for the Northwest. Write for price list.

GLADIOLUS
1 dozen Gladiolus bulbs, all large, 12 different varieties, packed separately and labeled, one dollar, postpaid for February and March.

A Few Specials In Large Sized Bulbs
Per bulb
Avalon ..... 15¢
Tiplady ..... 10¢
Lacinatus ..... 25¢
Peach Rose ..... 25¢
Baron J. Hulot ..... 10¢
FLORIADALE GARDENS
Wm. R. Leonard, Prop.
Route 1 Ft. Atkinson, Wis.

FOR SALE
Strawberry plants—Senator Dunlap, Gibson, Dr. Burrill, seven other kinds. Tree Strawberry. Everbearing Progressive, Mastodon Champion. Everbearing Raspberry, St. Regis, Latham.
Dahlias—Gladiolus—Peonies.
State Inspected. Write for prices
CHAS. J. BEIER Stoddard, Wis.

WILD FLOWERING PLANTS
Make city lot or large estate beautiful-valuable-interesting. Flowering land and water plants-berry-bearing shrubs that attract birds-fish-animals.
Suggestions-*price list free.*
Terrell's Aquatic Farm
1008W Blk., Oshkosh, Wisconsin

TREES
SHRUBBERY EVERGREENS
and
HARDY PERENNIALS
Plant this spring and enjoy beautiful grounds this summer.
We grow a large assortment.
A Postal request will bring our catalog.
Eschrich's Nursery
STA. F Milwaukee, Wis.

Nursery Stock
Seed Grains
Landscape Service
BAKER NURSERY & SEED CO.
Fond du Lac, Wis.

10 Delphiniums $1.20
Gold Medal Hybrids, 6 Plants 70c Prepaid
25 Gladiolus Bulbs $1.00
Improved, Wonderful Shades Mixed Varieties
6 Elegant Lilies $1.00
Dwarf, scarlet upright flower Blooms in June
8 Tiger Lilies $1.00
Fall, red spotted flower July bloomer
Full line Minnesota Station new fruits, Apples, Plums, Cherries etc.
Nursery Catalog Free
Order Now—Spring Shipment
SWEDBERG BROS. NURSERIES
Battle Lake Minnesota

Ask for our catalog listing 100 varieties of Dahlia and Gladiolus bulbs
COLUMBIA GARDENS
Cedarburg, Wis.

Selected Latham Raspberry plants. From high grade stock. Mosaic Free Inspected Two years.
$50.00 per 1,000 $30.00 per 500
$17.50 per 250 $ 7.50 per 100
A. B. RUSSELL
Route 1, Eau Claire, Wis.

TO PLANTERS
Hundreds of Varieties
Millions of little trees, shrubs, plants and tree seeds.
Write for price lists
American Forestry Co.
Pembine, Wisconsin

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS
President
C. J. Telfer, Green Bay
Vice-President
M. B. Goff, Sturgeon Bay
Secretary
H. J. Rahmlow, Madison

The Early Spring Flowers

Know The Wild Flowers and Protect Them

HURON H. SMITH

SPRING means different things in different states. To Wisconsin, early spring means March first to May 15th, but sometimes it is delayed, and then it means April first to June first. Our early spring flowers are few in number of species in comparison with those of the summer season, but the number of individuals of our spring flowers is countless. They carpet our northern woods.

Only three of our wild flowers have Spring in their names,—Spring Beauty, Spring Cress, and Harbinger-of-Spring. The Spring Beauty is a member of the lowly purslane family, which may account for the way it spreads in the spring woods, so densely covering the forest floor that one cannot step without treading upon it. Spring Cress inhabits our meadows and belongs to the mustard family. The tiny Harbinger-of-Spring grows in southern Wisconsin, but is very rare. It belongs to the parsley family.

The first flowers in our latitude are nearly all found upon trees,—the pussy willow, the Buffalo Berry, the Large toothed Aspen, the Smooth Alder and the Poison Sumac. Only one plant blossoms as early as they do, and it is perhaps the earliest of all,—the skunk cabbage. There have been years when a warm spell brought it up to flower in February. Few people suspect that it is a close relative to the haughty calla lily. Our Wisconsin black bear is very fond of the root of skunk cabbage in the spring, when it is particularly odoriferous.

Huron Smith, Department of Botany, Milwaukee Public Museum

At this time of year our fancy turns to thoughts of spring flowers. In this article, which Mr. Smith gave over radio station WTMJ, he tells of the flowers which may be seen in our woods from now on and also how they may be transplanted to our gardens.

The first half of April finds only a few flowers added to our list,—hazelnut, box elder, red maple, white elm and Trailing Arbutus, or Mayflower.

The trailing Arbutus cannot stand the pressure of civilization and disappeared from southern Wisconsin half a century ago. The very fact that they bloom so early has been their undoing. Probably ten carloads in the aggregate are sold from Wisconsin northern woods every spring. One year, two carloads were used for souvenirs at the Outdoor Show in Chicago alone. This business of reaping where we have not sown is a bad one, and the true sportsman will frown upon it. We should encourage people to purchase cultivated flowers and to discourage the exploitation of our wild flowers.

Fifteen spring flowers bloom from the middle of April to the first of May, and they are of the most evanescent character. The wind blows them open and also blows their petals away. They get their sunlight in the bare woods, but if they came later when the foliage made shade,

they could not survive. The snowberry, Sandbar willow, and Slippery elm are the woody plants that flower then.

The flowering plants are distinctly spring-like in character, such as the spring beauty, the hepatica, the False Rue Anemone, the two fawn lilies, yellow and white, the cut-leaf tooth-cress, the early meadow rue, the large flowered trillium, mouse-ear everlasting, watercress, dandelion, marsh marigold and blood-root. Most of them should be left where they bloom. Their petals fall so quickly after they are picked that by the time one reaches a street car, he is carrying a bunch of stems, which he usually casts aside before he boards the car.

Two of this number are absolutely destroyed if we pull their flowers. These are the fawn lilies, whose corm rots away when fruiting is denied the plant, and the trilliums. The trilliums have a corm also but depend upon the leaves to replace food material into their corm after the blossoming period is through. Such blossoms have very short stems and no one wants to pick them without at the same time picking the leaves on the stem. These beautiful forest lilies should be left in their own home, unless you expect to grow them in your wild flower garden.

One of our most beautiful wild flowers—an orchid, cypripedium or Ladyslipper

May Flowers

From the first to the middle of May we see the wind-up of flowers of the spring type. Sixty-eight species are found in our region. Let us mention only a few of the conspicuous ones. Greek Valerian or Jacob's Ladder with its bluish purple bell like flowers is becoming rare hereabouts. Jack-in-the-pulpit, the delight of every child, is one and the same thing with Indian Turnip which the mischievous boys try to get you to sample. It is not fatal to eat Indian Turnip,—just painful. The corm is full of sharp crystals of calcium oxylate that mechanically puncture the tongue and epithelial lining of the mouth. It has also been called Memory Root,—and certainly no one who has partaken can ever forget it.

Wild Ginger is one of the very modest flowers that most people miss when they go thru the woods. Its blossoms face the earth. The roots taste like ginger though it does not belong to the same family as the commercial ginger, and the roots have been used for many centuries by the Indians in their cookery. The Early Blue Violet is forerunner of a host of violets to come,—thirty species of them in Wisconsin. The wood anemone is one of the type called windflowers, because the wind blows them open and blows their petals away in the next breath.

The horsetail that often covers the right-of-way of railroads, is one of the most inconspicuous and yet the most interesting remnant of the carboniferous age. In carboniferous times, the most of the forests were different genera and species of horsetails. Now but one genus remains, and about 30 species, most of them rather inconspicuous.

Dutchman's Breeches is one of the quaintest flowers of this season. The youthful imagination has been robbed, unless they have seen one of these curious flowers. Pantelettes would be more nearly descriptive of the shape of the flower. It belongs

in the fumitory family along with the cultivated bleeding hearts.

The Creamy Vetchling is not so well known as some of the other spring flowers, but will be readily recognized from its resemblance to a sweet pea. One of the most appreciated spring flowers is the shooting-star. While it has become scarce around Milwaukee, because so many people persist in picking it, there are still large patches of it to be seen down at the sand dunes at Beach, Illinois. The Museum conducts field trips down there, and shows the assembled crowd a mile strip of shooting stars, as well as many other rare wild flowers. The Purple Plumed Avens is getting to be rather rare around Milwaukee proper, but is one of the prettiest spring flowers we have. Acres and acres of it may be seen in the neighborhood of Columbia and Dodge counties.

The Pasque Flower

About 15 years ago, the Pasque flower was always considered the Wisconsin State Flower, but a vote by the school children of the state settled upon the violet as our state flower. This may have been because South Dakota had chosen the Pasque Flower. The Pasque Flower is an anemone, and the earliest of them all, growing on gravelly ridges out in the open. The moraines around Palmyra are covered with these wonderful flowers at this very moment. Their densely hairy petals seem constructed to guard against the early cold weather.

One of the clowns among the early spring flowers is the May apple or Mandrake. The bleached central part of the leaves pushing up from the ground has a very grotesque appearance. Another peculiar companion of the May apple is the Adam and Eve or Puttyroot, our orchid of the spring. The blossom is greenish and not conspicuous.

In the ponds and edges of the lakes, we find a very beautiful spring flower called the Buckbean. The white waxy fragrant flowers are considered quite rare, and look almost "tailor-made". A good colony may be seen at Lake Beulah.

About May 1st one can see spring beauties, blood-root, early meadow rue, cut-leaved toothcress, skunk-cabbage, Marsh Marigolds, Catsfoot and snow trilliums. But every day of good weather brings out more of the

(Continued on page 238)

WILD FLOWERS SUITABLE FOR TRANSPLANTING

Common Name	Habitat	Blooming Time	Transplanting Time
Marsh Marigold	Wet	April 15—May 1	Fall
Hepatica	Moist shade loam	Apr. 15—May 1	Fall
Ferns	Wet to dry	June—August	Spring
Spring Beauty	Moist shade loam	Apr. 15—May 1	Fall
Fawn lily	Moist shade loam	Apr. 15—May 1	Fall
Blood Root	Sunny loam	Apr. 15—May 1	Early Spring
Large Flowered Trillium	Moist loam	Apr. 15—May 1	Early Spring
Greek Valerian	Loam	May 1— 5	Fall
Jack-in-pulpit	Loam	May 1—15	Fall
Early Blue Violet	Moist loam	May 1—15	Fall
Dutchman's Breeches	Wet shade loam	May 1—15	Fall
Smooth Yellow Violet	Moist loam	May 1—15	Fall
Prairie Wake Robin	Shady loam	May 1—15	Fall
Wild Geranium	Shady loam	May 1—15	Fall
Showy Orchis	Shady loam	May 1—15	Fall
Shooting Star	Sunny meadow	May 1—15	Fall
Plumed Purple Avens	Bog	May 1—15	Fall
Wild Blue Phlox	Moist loam	May 1—15	Fall
Pasque Flower	Sunny rocky hill	May 1—15	Fall
Large Fld. Bellwort	Moist shady loam	May 1—15	Fall
Bird's Foot Violet	Sunny sand	May 1—15	Fall
Buckbean	Water	May 1—15	Fall or seed
Golden Ragwort	Sunny meadow	May 15—June 1	Seed
Wood Betony	Dry shade	May 15—June 1	Fall
Senega Snakeroot	Rock garden	May 15—June 1	Fall
Painted Cup	Rock garden	May 15—June 1	Fall
Edible Valerian	Sunny swamp	May 15—June 1	Fall
Large Yellow Ladies Slipper	Bog	May 15—June 1	Fall
Hairy Puccoon	Sandy meadow	May 15—June 1	Fall
Canada Anemone	Open yard	May 15—June 1	Fall
Tall Buttercup	Swamp	May 15—June 1	Fall
Red Baneberry	Shady loam	May 15—June 1	Fall
Virginia Waterleaf	Shady loam	May 15—June 1	Fall
Wild Columbine	Dry loam	May 15—June 1	Fall
Larger Blue Flag	Swamp	May 15—June 1	Fall
Pink Lady's Slipper	Dry shady loam	May 15—June 1	Fall
Pitcher Plant	Bog	May 15—June 1	Fall
Lupine	Moist Sand	May 15—June 1	Fall
Sm. Wh. Lady's Slipper	Open meadow	May 15—June 1	Fall
Hoary Puccoon	Open sandy loam	May 15—June 1	Fall
Reflexed Spiderwort	Moist open soil	May 15—June 1	Fall
Cynthia	Sunny yard	May 15—June 1	Fall
Purple Cinquefoil	Swamp	May 15—June 1	Fall
Rattlesnake's Master	Roadside	May 15—June 1	Fall
Dame's Violet	Shady loam	June 1—10	Fall or seed
Bugle	Open meadow	June 1—10	Fall
Yellow Clintonia	Shady loam	June 1—10	Fall
Ox-eye Daisy	Sunny yard	June 1—10	Fall
Bastard Indigo	Open gravel	June 10—20	Fall or seed
Culver's Root	Open meadow	June 10—20	Fall or seed
Wild Bergamot	Sunny yard	June 10—20	Seed
Black-eyed Susan	Sunny yard	June 10—20	Seed
Canada Lily	Shady loam	June 10—20	Fall
Sweet Flag or Calamus	Water	June 10—20	Fall
Twin Flower	Shady loam	June 20—30	Fall
Beach pea	Open wet gravel	June 20—30	Fall or seed
Virgin's Bower	Sunny yard	June 20—30	Early spring
Tall Cone Flower	Sunny yard	June 20—30	Fall or seed
Evening Primrose	Sunny yard	June 20—30	Fall or seed
Lead Plant	Sunny yard	July 1—10	Fall or seed
Wh. Wild Indigo	Sunny yard	July 1—10	Fall or seed
Butterfly Weed	Sunny yard	July 1—10	Fall or seed
Turk's Cap Lily	Sunny yard	July 1—10	Fall
Bladder Campion	Sunny yard	July 1—10	Fall or seed
Tall Bellflower	Shady loam	July 11—20	Fall or seed
Mountain Mint	Sunny yard	July 11—20	Fall or seed
Western Red Lily	Sunny yard	July 11—20	Fall
Sunflowers	Sunny yard	July 11—20	Fall or seed
Broad-lvd. Arrowhead	Water	July 11—20	Fall or seed
Smaller Fringed Orchid	Shady wet loam	July 11—20	Fall or seed
Goldenrods	Sunny yard	July 11—20	Late Fall
Purple Prairie Clover	Sunny yard	July 11—20	Fall
White Snakeroot	Sunny yard	July 21—31	Fall
Cardinal Flower	Wet shade	July 21—31	Fall or seed
False Dragon-head	Sunny meadow	July 21—31	Fall or seed
Asters	Sunny yard	July 21—31	Fall or seed
Turtle-head	Sunny yard	Aug. 1—18	Fall or seed
Bottle Gentian	Sunny meadow	Aug. 1—18	Fall or seed
Indian pipe	Deep shady loam	Sept. 1—30	Fall
Nodding Ladies' Tresses	Open meadow	Sept. 1—30	Fall

Why Breed New Varieties

W. H. ALDERMAN
Chief, Division of Horticulture
University of Minnesota

IT WOULD be interesting, if it were possible, to set back the dates of this meeting some 300 years and sit in with a group of colonists at some point along the eastern coast of the United States. We have grown used to living in a rich and prosperous country, with its almost infinite variety of manufactured articles of usefulness, convenience and luxury, and with a food supply that has never before been paralleled for its abundance and for its variety. We take these things for granted as we do the telephone, aeroplane and the radio, but could we move back three centuries, a scant dozen generations, we would find a very different situation.

The colonists came to America with great expectations. But after all they didn't find very much in this new country other than an opportunity—opportunity to develop a raw land, with a relatively small number of economic plants, into a garden spot for the children of their children's children.

It was an inhabited country and yet the food products were very limited in number and inferior in quality. There was no grain except Indian corn. There were very few native vegetables. Out of thirty-two of the most widely grown vegetables in America today, only eight are of native origin. They found wild fruits, it is true, but here again they must have been disappointed in what they found. The wild apples were impossible and never have been utilized as economic plants. There were no pears, no peaches, no cherries except the pincherry, chokecherry and others of similar nature. There were grapes, it is true, also plums in abundance, but the quality of these was so inferior as compared with the familiar varieties of the Old World that they seemed scarcely deserving of attention. A few of the wild berries were somewhat better, but on the whole it was a disappointing lot that these early settlers found available for their use.

Prof. Alderman was one of the principal speakers at our convention in December

It is interesting to note at this point that, while the United States has become the greatest fruit producing country in the world, it had to introduce practically all of the species of fruits of economic importance from other countries of the world.

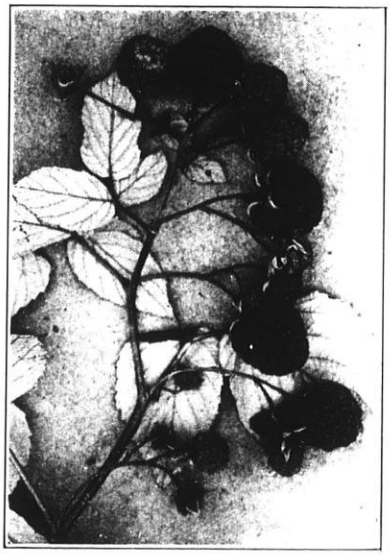
The early settlers began this introduction by bringing in scions and seeds of their favorites from the Old World. These, when planted in America, were for the most part disappointing. Most of them did not thrive as well in the New World as they did in the Old, but occasionally, here and there, a new plant growing from seed, displayed some especial merit. Most of the orchards and fruit plantations were grown from seeds and of course produced a wide variety of types. Gradually the

best of these varieties were sifted out, were propagated by grafting or budding or by cuttings, and a new list of fruit varieties became established in the new country. What was true of the fruits, was also true of the vegetables and flowers, and incidently, of nearly all the agricultural crops.

As time went on, the new country gradually developed the land placed under cultivation and the pioneers were constantly pushing the frontier to the westward. 250 years rolled by and we find the great valley of the Mississippi being opened up and developed for agriculture. The development of the northern part of this central area presented a new problem to the horticulturist, particularly to the fruit grower. The varieties of fruits that had been developed in eastern United States had become standardized and were proving reasonably satisfactory as they were carried westward to Ohio, Indiana, in fact until they reached the wind-swept areas of the northern prairie land, and here they failed to grow, for a new problem had injected itself into the situation. Cold winters killed out the plants and hardier varieties were required.

We are familiar with the developments of the past fifty years; familiar with the search that went on in distant Russia for hardy varieties of apples that might be transplanted to northern Iowa, Wisconsin and Minnesota; familiar with efforts of dozens of enthusiastic fruit growers in these three states, who, after failing to grow the older varieties of the East, planted seedlings and began to find here and there a new variety that would withstand the trying conditions of the new country.

History began to repeat itself and just as the colonists of the Atlantic seaboard developed new varieties suitable to their new conditions, so did the pioneers of the upper Mississippi Valley begin to produce new fruits that were adapted to their new environment. In the meantime a new situation has arisen. The horticultural industry of America has become intensely commercialized, not only from a national but from an international basis. An enormous commercial fruit industry has developed in the last fifty years. Agricultural experiment stations have made their appearance bringing to bear all the power of modern science upon the solution of the problems that have arisen with the enormous expansion of crop production.



Latham Raspberry, a Minnesota introduction

Fruit growers seem to be less willing to grow seedlings, knowing that about 99 per cent of them will be worthless, or of little value. They are unwilling to wait for a century, or two centuries, in which stray seedlings of real merit and value may appear here and there to give them their standard varieties of satisfactory quality.

Our forefathers took from two to three hundred years to develop the varieties of fruits that we are now growing in eastern America, but modern agriculture demands more speed and so today organized plant breeding is being conducted on a more extensive basis than ever before in the history of the world. In the breeding of fruits alone there are from fifteen to twenty important state or federal stations operating on an extensive scale in the United States and Canada. Literally thousands of seedlings of fruits are being grown and studied by trained observers all over America and what is true with fruits is equally true with vegetables.

A year ago the Horticultural Division of the University of Minnesota held a series of conferences with the vegetable growers of Minnesota in which was planned a program of research that would touch the most needed problems in that particular field. After a long consideration the vegetable growers determined upon six problems which were in greatest need of attention and every one of these was a problem in plant breeding or selection. The breeding of flowers and ornamentals is receiving a large amount of attention, but because of the nature of the enterprise, it is attractive to both the commercial grower and the amateur and less pressure has been placed upon experiment stations to undertake the work.

We might pause to wonder that, with the large list of fruits, vegetables and flowers at present available, why it should be necessary or worth while to pursue the breeding of new varieties on such an extensive scale. If we would but take the time, however, to go over these varieties individually, we would soon see the reason for the intense activity. There is not one that does not have some obvious defect. Name, if you can, a perfect variety of apple. McIntosh is a wonderful fruit as grown in your state of Wisconsin, but where is the grower who does not wish that it would hang to the tree a little better in the fall.

(Continued in the May Issue)

Varieties and Culture of Iris

MISS CELIA DIX
Milwaukee Horticultural Society

THE Iris is one of the most popular and satisfactory of flowers. It thrives in the most inhospitable soil and any location which is drained and sunny.

This is especially true of the bearded or German Iris. Like most flowers, however, it enjoys good treatment and repays it. A little bone meal or sifted coal-ash occasionally as a fertilizer brings wonderful results.

In those gardens which are subject to long, hot dry spells, which cause disaster among less adaptable plants, they are especially satisfactory.

It also does well in damper spots, but it prefers a limestone soil. It will not thrive in sand. The Japanese Iris, however, does not prefer a limestone soil. It needs a rich soil, lots of water and will not stand crowding. Any one proposing planting Japanese Iris should trench the ground deeply, mixing with the soil some well-rotted manure, leaf mold, and the refuse from the potting bench so as to get a good depth of loose, friable soil into which the roots can work freely. It needs moisture and an open position away from the shade of trees or shrubs. They delight in water when in bloom but not at other times during the year.

Among the dwarf Iris the variety commonly known as pumila, our native species Cristata does well in either full sun or partial shade and is not particular as to soil. Other species like the beautiful little Japanese alpine called Gracilipes, require a partially shaded place in a well-drained soil of leaf mold. Another dwarf of our American species called Verna requires the same treatment. It is very beautiful, lovely lavender blossoms lined gold along the falls. Unfortunately, it is rather chary of its bloom if growing conditions are not just to its liking. It wants partial shade and some say this variety needs a little acid in its diet. The Reticulata which is an extra-early species likes the warmest, best-drained place in the garden preferably in light soil. There are many other dwarf Iris some of which require special treatment, but most of them do well in any ordinary garden soil.

These articles on Iris were given at the meeting of the Milwaukee Horticultural Society. Each month papers of special interest are presented. Garden clubs in which each member gives at least one paper during the year are especially successful. Other topics given by the Milwaukee club on the subject of Iris and Dahlias will be published in early issues.

Then there is the Siberian Iris, somewhat similar to the Japanese Iris in their liking for water, but do well in good garden soil when watered freely.

Other types are the pseudacorus (Yellow-flag) and versicolor (Common wild Blue flag) which prefer boggy, wet places. These are adapted to naturalizing in swamps or by stream sides where they are most effective in the mass.

IRIS VARIETIES. ADVISED BY MEMBERS

MRS. KLINGBEIL

Siberian Iris

Perry's Blue—Wonderful shade of blue.
Emperor—Very dark blue.
Snow Queen—Pure white.
Blue King—Intense brilliant blue.
Kingfisher Blue—One of finest and taller than Perry's Blue.

German Iris

Florentina Alba—White.
Koshii—Deep blue.
Firmament—Dark blue.
These three are called great because they are such high quality and are so early in bloom, before Memorial day.
Aurea—Rich chrome yellow. Standard Varieties.
Caprice—S. rose red, F. deep red.
Isolene—Silvery lilac mauve with orange beard.
Iris King—S. coppery yellow, F. crimson bordered yellow.
Junita—Dark blue, very large, fragrant.
Lohengrin—Soft shades of Cattleya rose, orchid-like.
Monsignor—S. satiny violet, F. purple crimson.
Pallida Dalmatica—Lavender blue.
Rose Unique—Almost red, an early flower.
Ann Page—Lovely lavender pale blue, Choicer Varieties.
Ambassadeur—S. reddish violet, F. Deep brown.
Chaaeurs—Finest yellow.
Dominion—S. light bluish violet, F. deep indigo and purple.
Aurora—Pink, the very finest pink.
Kashmir—Tall pure white.
Lent. A. Williamson—S. violet, F. rich royal purple.
Mother of Pearl—Pale blue lavender, 48 in. tall.
Princess Beatrice—S. violet blue, F. deep purple.
Susan Bliss—Pink, mid-season.
Shekimah—Pale lemmon yellow.
Sour. de Mme. Gausichau—Clear lavender blue shading to silvery blue.

Spanish Iris, Bulbless

Regelia Korolkowi.
Juno persica.
Reticulata Bakercana.
Oncocyclus Susiana.
Juno alta.

Dutch Iris, Earlier, Developed from Spanish Iris

White Excelsior—White, pure.
Hart Nibrig—Clear blue.
Renbrant—Dark blue.

Arie Scheffer—Very dark blue.
Cornelius Troost—Pale yellow.
J. W. DeWilde—Deep yellow.

Spanish Iris

Queen Wilhelmina—Extra early, pure white.
British Queen—Extra early, pure white.
Excelsior—Late, light blue.
King of Blues—Dark blue.
Chrysalora—Pale yellow.
Cayanus—Deep yellow.
Thunderbolt—Dark bronze.
Bronze Queen—Terra Cotta.
Golden Lyon—Rich yellow frilled. New, not introduced.

English Iris

Later than Spanish and easier to grow.
Mer de Glace—White.
Tantalus—Light blue, shaded darker.
Princess Juliana—Deep blue.
Prince of Wales—Purple.
Queen Alexandria—Lavender.

Iris Filifolea

Imperator—Wonderful clear blue, extra large flowers.

Iris Tingitana

The First—Very dark blue, growing 3 ft. tall.

Japanese Iris

Gold Bound—White with yellow center.
Alba Plena—Pure white.
Amethyst—Delicate lavender.
Painted Lady—White flushed with bright pink.
Pyramid—Light blue veined white.
Vesta—Ashgray, purple veined.
F. S. Ware—Dark garnet.

Dwarf Iris

Atroviolacea—Earliest, violet mauve.
Caerulea—Sky blue.
Citrea—Yellow.
Schneekuppe—White.
Cyanea—Rich purple.
Verna—Lavender gold lined along falls.

Variety Pumila

Cristata—Native species.

Japanese Alpine

Gracilipes.

Dwarf Iris

Reticulata—Extra early.

Native Iris

Marsh conditions

Pseudacorus—Yellow flag.
Versicolor—Blue flag.

"The other night while I was out with some of the boys a burglar broke into our house."

"Great Scott! Did he get anything?"

"I'll say he did! My wife thought it was me coming home!"

A Lesson for Potato Growers from the Season of 1928

J. W. BRANN

The 1928 potato season will long be remembered as one of the most unprofitable in history, for Wisconsin farmers. Coupled with a price of 30 to 40 cents per hundred in the growing sections, late blight rot caused a lot of additional work and loss of profit.

Many steady growers take the attitude that an unprofitable year at long intervals may steady production as there is a tendency to increase acreage during good years. It is unfortunate we have not developed a better method of controlling acreage.

THE season of 1928 brought to Wisconsin potato growers very forcibly that unusual disturbances may occur after one is set to announce the most wonderful crop in history. The writer had occasion to observe some beautiful fields of Rural New Yorkers and Green Mountains during the midsummer period. The combination of a productive strain, suitable soil, good tilth and the application of a well-balanced fertilizer resulted in that uniformity of vigor, health and general satisfactory performance that was indeed pleasing to observe. Field after field gave promise of high quality potatoes.

In some of these sections a new picture not at all encouraging presented itself in late summer. Late blight had become active. Cool and moist weather conditions favored the development of the disease which assumed epidemic proportions in some sections, especially those having heavy soil. Many fields of Green Mountains and Rural New Yorkers which showed great promise earlier in the season became heavily affected, and in such cases there was heavy infection of late blight rot. This was especially true where growers did not apply bordeaux mixture in either liquid or dust form.

It was noted that less rot occurred on tubers from fields which received thorough application at the proper time. Many growers made the mistake of discontinuing spraying too early in the season. Infection of the plants occurred especially late, hence the need for continuing the spray.

The Green Mountain variety suffered the most with rot. The character of the growth of this variety favored the development of the disease. The following suggestions may serve helpful to growers.

1. Wider spacing between the rows to afford better air circulation. This applies to the Green Mountain variety.

2. Close observation of seasonal tendencies in relation to the disease on the vines. In 1928, because of favorable late growing conditions, the major infection of blight occurred in late summer.

3. Continued application of spray materials late enough in the season to protect the plants against late infection. Growers who followed thru in 1928 with the application of the spray up to the time that the crop was practically made obtained a satisfactory control. This applies especially to Green Mountains and Rural New Yorkers.

4. High pressure and thoroughness of application are essential for best results.

Some New Hardy Perennials

W. A. TOOLE

Enlarging our acquaintance with new flowers is like making new friends. Each one opens up new possibilities. In this paper, which Mr. Toole presented at the Annual Convention he tells of some of his new friends. We hope you will also like them.

AS WE generally understand the term, hardiness refers to a plant's resistance to winter cold, but it is equally as applicable to heat, drought, wetness or any extreme condition affecting growth. Considering it only as applied to a plant's ability to withstand Wisconsin winters, there are still many things to be considered besides extreme low temperature, such as snowfall, drainage, variations in temperature and soil texture. Out of all this, you can see that it is hard to make a definition of Hardy Perennial, for at best it can only be a comparative term.

During the last few years there have been several talks given before this Society on some such subject as the best dozen Hardy Perennials. Most of us know considerable about the old standbys so I will mention some newer kinds I have tried out or some of the old kinds that are not commonly grown.

Several years ago, Mr. James Roe of Oshkosh called my attention to some plants growing in his garden that were quite striking in appearance, large rosettes of rough hairy leaves, dark green mottled with large spots of gray green. The flowers are blue and the whole appearance of the plant was like a mottled Anchusa. This plant had been growing for years in an old garden at Oshkosh and seemed perfectly hardy though none knew its name. It has proven to be one of the Lungworts, or Pulmonarias. For some reason it does not seem to be grown very frequently, nor offered to any great extent by the trade. It may be propagated easily by division, or from root cuttings and presumably also from seed.

In my father's garden had been growing a blue flowered plant for several years holding its own without much care or attention for several years and flowering early each June with a wealth of blue purple flowers on stems about eighteen inches high.

Tracing this down seems to place it as a species of Dracocephalum, or Dragon head possibly Ruyschiana. Whatever its name it is surely very hardy and enduring and attractive.

We always look on our wild water flag, Iris versicolor, as distinctly a water plant. I was considerably surprised to find it grows more luxuriantly in raised beds of newly broken earth, where the soil is like a dry ash heap most of the summer, the foliage reaching a height of three feet and flowering freely.

The Cardinal Lobelia is another native plant most often found growing in distinctly wet places that seems to show up most attractively under cultivation. Unfortunately, it is uncertain as to winter hardiness under cultivation, though I think an early covering with leaves before freezing weather, is most helpful to it.

Doronicum, or Leopard's Bane is another old timer which is very attractive. Unfortunately, the yellow daisy-like flowers which appear very early in the season, have to compete with the glory of the Dandelion many years. It is hardy if the crowns do not gather too much moisture during winter or spring. Divide each year in mid-summer for best results.

A few years ago some friends brought us plants of a lovely blue-lavender flowers, large tubular flowers on a long stem 24-30 inches tall, that they had found on the Railway right-of-way, west of Kilbourn. These have been identified as Pentstemon grandiflora or shell leaf Pentstemon, native to the Dakotas and western Minnesota, but not commonly met with in Wisconsin. The lovely color in June, is so attractive it is hard to understand why it has not been introduced to more general cultivation. The Shell Leaf Pentstemon seems to thrive best in a loose, well-drained, though fertile soil.

A New Poppy

One of the newer Oriental Poppies that is attracting attention is the variety, Lulu A. Neeley. The color is a brilliant blood-red, much brighter than the orange-scarlet of the type.

Two or three years ago, an Ohio firm introduced an Artemesia with silvery gray foliage under the name of Silver King. Some gardeners called it a wonderful find and others discarded it as a weed. It seems to be finding its place in the garden world, and is very attractive when planted in combination with perennials of a soft color. In late summer and fall the foliage is useful in combinations with flower arrangements, especially with pink flowers. It may be also cut and dried for winter use. Be sure to dry with tips hanging down, otherwise the drooping tips give it a wilted look.

Viola Jersey Gem has been on the market for several years though it may still be classed as something of a novelty. The lovely deep purple flowers appear almost the whole summer through, except in the very hottest weather. While hardier to winter cold and spring uncertainties of weather than the pansy, it is still something of an uncertainty.

(Continued on page 251)

How Much Fertilizer Does the Orchard Need?

R. H. ROBERTS

THERE is no general rule for the amounts or types of fertilizer that should be used in the orchard. The amount and type of growth which the trees make is a good index of the fertilizer requirements of the trees.

It will be noted when looking at older bearing trees that different branches or parts of the trees show large differences in the set of fruit and the size and quality of the fruit borne. That is, the kind of growth greatly affects production. This is also true of different trees. Consequently some trees may need to be fertilized and others should not be.

In general, most orchards need a nitrogen fertilizer. This is principally because the growth is made so early in the season that nitrification has not yet taken place and the needs of the tree should be supplemented by the addition of quickly available forms of nitrogen fertilizer about the time growth starts in the spring.

Very few experiments show that benefits are obtained from the use of potash and phosphorus in apple orchards even in situations where these materials markedly improved the production of corn or small grains. It is quite clear that there is no such effect upon the ripening or coloring of fruit as may be observed at times in the maturity of cereals.

The growth of the weeds or plants used as cover crops is a good index of the fertilizer needs of the orchard. If these plants make a good growth, it is a fair index that potash and phosphorus are not needed in the orchard.

Many times a large percentage of the apples on a tree are of small size. This is generally due to failure to prune off the run out and weak wood in the tree, and may not be much due to the fertilizer program. Fertilizer should be used with the other cultural operations to maintain a satisfactory terminal growth in the trees. The type of growth on different branches is a pruning problem.

The usual practice is to apply from three to six pounds of a readily available nitrogen fertilizer two to three weeks before the trees blossom. Under some conditions the trees respond to heavier applications. If the trees are already making too much growth, no fertilizer should be used. Look at the trees and see what types of wood bear the best fruit. Use that amount of fertilizer that results in the type of wood which is most productive.

OUTLOOK FOR POTATOES NOT ENCOURAGING

REPORTS this year from potato growers indicate that they are planning to plant eleven per cent less acreage than was planted last year. If this is true, and farmers usually have planted approximately what was estimated in January during the past few years, there will be no great reduction in the potato crop next fall if weather conditions are good during the growing season.

The farmer who plants potatoes every year as a part of his crop rotation, will probably fare very well. But the speculator has nothing to gain.

Neither does it look as if there is any chance of potatoes going up in price during the next few months on account of the large holdings still left in the country.

EVERGREENS
All kinds of trees and Evergreens for sale at reasonable prices.
Write for prices.
S. KNISKERN
Middle Inlet, Wisconsin

We specialize in Regal Lilies
Wholesale and Retail
H. C. Christensen
1625 Ninth St.
Oshkosh, Wis.

KINKADE GARDEN TRACTOR
and Power Lawnmower
A Practical Proven Power Cultivator for Gardeners, Suburbanites, Truckers, Florists, Nurserymen, Fruit Growers, Country Estates and Poultrymen.

Catalog Free
AMERICAN FARM MACHINE CO.
1085-33rd Ave. S. E. MINNEAPOLIS, MINN.

HARDY FRUITS FLOWERS
And ORNAMENTALS
At Right Prices
They Grow and Please
Landscape Suggestions and Catalog on Request
STRAND'S NURSERY
Box 22, TAYLORS FALLS, MINN.

Let us supply the material to make your home a beauty spot.
We have a complete line of trees, plants, and shrubs for the garden, lawn and orchard.
THE COE, CONVERSE & EDWARDS CO.
FORT ATKINSON, WISCONSIN

Apple Scab Control

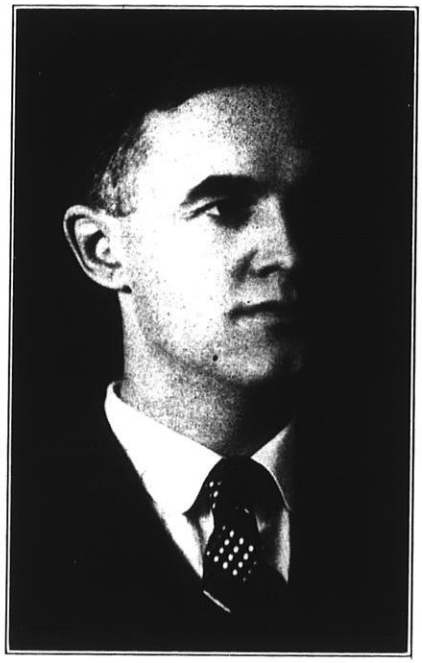
Experiments in 1928 Give Important Results

R. E. VAUGHAN

APPLE scab continues to be one of the major factors in apple production in Wisconsin. It is a fungus disease profoundly modified by weather conditions which makes research studies on this problem of much interest and value, both to the investigator and to the apple grower. Dr. G. W. Keitt and his associates at the experiment station have continued their studies during the past season giving attention to the following topics; the influence of weather on scab development, materials used, modification of pre-blossom applications, modification of later applications, and fall spray treatments.

Scab infected apple leaves were collected at Sturgeon Bay, April 24, under a Dudley tree. The fruiting bodies of the fungus were only partly mature at that time. The first discharge of spores was recorded on the spore trap on May 3, 4, and 5 following a slight rain, although a few mature spores had been found in leaves on April 30. The height of the spore discharge was reached earlier in the Dudley than in the McIntosh leaves, May 15 to June 11 for the Dudley and June 7 and 26 for McIntosh. The development of these spores from the over-wintering leaves diminished quite rapidly after June 27 when a period of hot dry weather started. The last discharge was recorded July 13. Observations on the different varieties during light rains showed that spores were discharged sooner and more freely from Dudley leaves than from McIntosh. Observations on the number of spores per cubic foot of air on May 29 showed that between 5:30 and 6:30 there were 19 spores, between 6:30 and 7:30, 17 spores, and between 7:30 and 8:30, 64 spores. An air filtering apparatus installed on top of a platform 12 feet from the ground showed from 1/5 to 1/3 the number of spores caught at the 18 inch level.

The first visible scab lesions were found May 31 from infec-



R. E. Vaughan, Extension Specialist in Plant Pathology

tion which was undoubtedly initiated during the rains of May 16-17. The trees at the time of infection were in the late "closed cluster" condition. Infection occurred on the sepals and the small leaves surrounding the blossoms. The extensive leaf and fruit infection of June 23 evidently resulted from the 12-hour rainy period of June 12. This incubation period was somewhat shorter than the earlier one because of the higher temperature. Other long rainy periods were likewise followed by waves of scab infection on fruit and leaves.

Tests of the control of apple scab were made with liquid lime-sulphur, Wettex, sulphur dust, and Kolotex dust. Arsenate of lead, 1-50, was added to all spray materials used. On the Dudley variety, where 100% of the fruit of unsprayed trees was scabbed at harvest, 5 applications of lime-sulphur reduced the scab to 14 or 30%, depending on time of application; Wettex, 65% in 5 applications timed as in the lime-sulphur plot which had 30% scab; sulphur dust, 14% in 12 applications; and Kolotex dust, 24% in 12 applications. In the sulphur dust applications lead arsenate was added from June 12 to August 2 to control insects. The dates of spray applications were: delayed dormant, May 4; pre-pink, May 12 (the buds were between early and medium closed cluster condition); delayed pre-pink, May 18, pink, May 24 (a few of the more advanced trees had started blooming); calyx, June 11 (about four-fifths of the petals were off the Dudley); ten-day, June 22; thirty-day, July 7; summer, August 17. Dust applications were made on May 4, May 12, May 16, May 28, June 12, June 17, June 26, July 8, July 19, August 2, August 17, and August 29.

A striking increase in scab control was observed in Dudley where the delayed pre-pink spray was used. This was probably due to increased control of sepal infection and the infection of leaves surrounding the blossom clusters. Unsprayed fruit showed 81% with sepal infection. Lime-sulphur in 4 applications at pre-pink, pink, calyx, and 10-day stages gave 12% of scabby fruit. Lime-sulphur in 3 treatments at pink, calyx, and 10-day stages gave 61% and in 4 treatments at delayed pre-pink, pink, calyx and 10-day stages gave 9% scabby fruit.

Leaf infection was also greatly reduced by the delayed pre-pink application.

Modifications in the summer spray which should be particularly noted are the following. Whereas the delayed dormant, pre-pink, pink, calyx, and 10-day applications of lime-sulphur gave 30% scabby fruit when this program was supplemented by a 30-day spray applied July 7, the scabbed fruit was reduced to 10%. In a similar program in which Wettex was applied instead of the lime-sulphur on July 7, 18% of the fruit was scabbed, and when Kolotex was substituted for Wettex 13% was scabby. When three applications of Kolotex dust (July 7, July 19, and August 17) were substituted for the treatment on July 7, only 6% of the fruit was scabbed. These experiments were made on the Dudley variety in the Sackett orchard, and all the apples were counted on two trees in each plot, a total of over twelve thousand apples on 14 trees.

Fall sprays for holding down the overwintering stage of the scab fungus are giving striking results on an experimental basis. The problem seems to be to find the correct material which will kill the fungus and not injure the trees. Calcium arsenate with the addition of materials to check spray injury seems most hopeful at the present time. Where the number of viable spore cases was placed at 100% on unsprayed leaves, certain calcium arsenate mixtures reduced the spore cases which matured to 9 and 6% respectively. A mixture of Paris green with neutral Bordeaux mixture reduced the spore cases to 19%. Progress on this problem is necessarily slow because considerable time is required to determine the possible injurious effects of the fall spray on the trees.

Owing to the influence of weather conditions on the development and control of scab, it is important to stress pre-pink sprays. In case these fail, much success can be secured by additional sprays or dusts applied later in the season. While best control of scab can be secured where spray is applied before infection occurs, much good can be done if lime-sulphur, 1-40, with arsenate of lead is applied within 24 hours after an infection period. Watch the weather and spray accordingly.

THE TARIFF ON LUMBER

Will be Expensive for Horticulturists

A TARIFF on lumber, shingles and logs is proposed by West Coast Lumbermen.

The American farmer uses 43% of all the lumber consumed and is therefore the largest single user. He uses 15 billion feet annually, including 70% of all the shingles used in the United States, of which 85% come from Canada and are of superior grade.

A 25% ad valorum tariff would cost the farmer over 150 million dollars,—and congress is trying to help the farmer!

Horticulturists will be effected by this tariff as it will increase the price of wood containers, barrels, boxes, baskets, etc., used for fruits and vegetables, a burden the industry can ill afford at this time.

Furthermore, we hear a great deal about our fast disappearing forests. Authorities predict our virgin timber will be exhausted within 30 years. We are harvesting timber four times as fast as it is being grown. It would require 25 million acres annually to grow the timber imported from Canada. Why then hasten the day when our supply will be exhausted by keeping out the foreign supply.

There are other arguments against the tariff on lumber and the only one in favor seems to be that a few West Coast Lumbermen want to make more money at the expense of everyone else.

They export lumber to Japan in competition with Canada and make money, so it isn't because it costs them more to produce it.

The Wisconsin Legislature passed a resolution asking Congress to keep timber on the free list. The resolution was introduced by Assemblyman Don Smith, Chairman of the Agricultural Committee, at the request of Mr. George Knutson, Sidney, Montana, who is working hard on this matter as a lumber tariff would greatly effect Montana farmers.

The Board of Managers of the Wisconsin State Horticultural Society have sent a resolution protesting against it to the Tariff Committee, of which Congressman Frear of Wisconsin is a member.

EVERBEARING
Strawberry
Plants
Northern Grown
Mastadon Strain
Buy Direct from Largest Growers in the North. Stock that is acclimated and bred for production.
STATE INSPECTED
Clip and mail to:
THE ISLAND FRUIT FARMS INC., Bradley, Wisconsin.
50 Plants $1.50
100 Plants 2.50
500 Plants 10.00
1000 Plants 18.00
STANDARD SPRING VARIETIES
SEN. DUNLAP & WARFIELD
1000 strong plants..... $10.00

Using Paraffin for Grafting

THE "Paraffin Method" is described as "A Most Revolutionary Forward Step in Propagation", in the March issue of the American Fruit Growers Magazine.

The method can be used for both hard and soft wood grafting and the work can be done at any time of the year. It can also be used in bridge grafting for trees girdled by mice or rabbits. It is also used for the cut ends of large limbs which have been sawed off in the course of top-working.

The Method

The form of paraffin which will be the most serviceable for this purpose is the common parowax which may be obtained at any grocery, says Mr. R. T. Morris, the author of this article. Various forms of melters are used. He refers to a practical handy melter sold by Edwin C. Tyson of Flora Dale, Pa. It consists of a transformed railroad lantern with alcohol burner. A paraffin melter sold by the late J. F. Jones of Lancaster, Pa., and still to be obtained from his estate, consists of a cup and box, the latter carrying a charcoal fire. C. R. Biederman has devised a melter described in Bulletin 76 of the University of Arizona, Agricultural Experiment Station, using a kerosene burner.

The melted paraffin must cover the scion bud and all, as well as the wound in the stock and the wrappings in which case the method is a success. In fact, states the article, this new method seems to have changed the entire method of grafting so that almost anyone may now do almost any sort of grafting. The paraffin fills all spaces in which sap might collect and ferment but at the same time, it hardens quickly and forms a protective covering.

Raffia should be used to secure the tongue of bark firmly against the scion and melted paraffin is placed over all. If a single bud of a graft is left uncovered with melted paraffin, one part of the principle is lost. Not one bud should be left uncovered.

The cutting and shaping of scions should be done in the evening to save time and may be kept in Knudson's solution consisting of 2.25 gm. $CaCl_2$, 1.25 gm. Na Cl, 1.50 gm. KCL, 1 liter H_2O. This may be obtained from any drug store and will keep the scions fresh for 24 hrs. or longer.

VALUE OF HONEY BEES

THE value of the honey bee in pollenizing fruit trees and a great many other plants is well known. In Michigan the Legislature appropriates 25 thousand dollars per year to carry on bee inspection work to rid the state of American foul brood, which is the most dangerous disease of bees.

A letter from Mr. H. D. Hootman, Secretary of the Michigan State Horticultural Society, states "Until two years ago about ten thousand dollars per year was spent in this state to carry on the inspection and eradication of foul brood. At that time the fruit growers of our state became interested in the problem because of their interest in having bees in their orchards for pollenation purposes.

For the most part Michigan fruit sections are not good bee keeping territory and the fruit growers have been interested in a rental proposition so that the bees could be moved into the fruit section for the blossoming period and later removed. Naturally bee keepers hesitated about locating their bees in diseased areas so we have been trying to clean up the situation.

Two years ago several of us went before the Governor and State Administrative Board and had the amount of money for bee inspection work raised to approximately $40,000. (For the two year period)."

In Wisconsin twenty counties have appropriated from their funds about $5,000 dollars to be spent with an equal amount provided by the state.

It takes about one colony of bees for each acre of orchard and healthy colonies of bees are absolutely essential for successful results.

The appropriation in Wisconsin is hardly adequate to clean up the state and if the fruit growers become more interested in the value of bees in their orchard, they should make a decided effort to have this amount increased so that bees may be transported without danger of losing them from foul brood. A beekeeper with expensive modern equipment cannot afford to move his bees into a location in which there is danger of the disease being transmitted to his colonies.

For the benefit of those who like honey but do not keep bees, we will say that foul brood does not in any way effect the adult bees or the honey. It is a bacterial disease killing the young bees before they are hatched.

The value of the honey crop in Wisconsin is over one million dollars annually and the value of the bees in cross pollenation in fruits and flowers is equal to or exceeds the value of the honey produced by them.

(Continued from page 229)

spring flowers. It is almost as difficult to give the exact date of their appearance as it is to discover the first bird of the spring. But most of us get a lot of fun trying to discover them, and they are one of the valuable things that take our minds off ourselves. It is much like Josh Billings said,—"A reasonable amount of fleas is a good thing for a dog,—it keeps him from brooding over the fact that he IS a dog".

A Tariff on Bananas Will Help the Farmer

THERE is a lot of talk about helping the farmer. The present Congress hopes to accomplish a great deal to relieve the farming situation. Unfortunately help for the farmer doesn't always mean help for the rest of the people of the nation and consequently proposed measures that would really help the farmer are fought by people who have been boosting for farm relief Legislation.

The tariff on bananas is a measure proposed to help the fruit growers. An analysis of the situation shows that it will be a good deal of help. The National Horticultural Council composed of Horticultural organizations from all over the United States is backing this tariff as a real help for fruit growers and farmers. The proposed tariff is 1½¢ per pound.

Assemblyman M. B. Goff of Door County, Vice-president of this Society has introduced a resolution in the Legislature asking Congress to favor this tariff. We have heard several Legislators criticize the Bill and one or two newspapers have ridiculed it. But how can we increase the price of fruit when we have terrific competition with bananas imported from the Tropics. Here are some of the facts:

The imports in 1927 were 61 million bunches, and in 1928, 64 million bunches. The imports now exceed the carload shipments of each of our leading fruits and they equal about 30% of the carload shipments of all fresh and dried fruit.

The United States imports over 1 billion more pounds of fruit than it exports and bananas constitute 92% of all the fruit imported, by weight.

The average import price of bananas in 1927 was 1.1 cents per pound. Thus two factors, large volume and low prices are operating together to depress the American fruit industry.

Bananas come chiefly from the West Indies, Central and South America, Jamaica and Honduras. There they are grown on cheap land. The jungle is not cleared before planting. The undergrowth is cut down and the rhizomes planted. Bananas begin to bear in about a year and last ten to fifteen years. No spraying or fertilizing is necessary. Low grade peon labor is used in growing the bananas.

American fruit growers and working men are compelled to compete with this labor through absence of a tariff on bananas. Profits from the fruit growing industry in the United States shows a marked decline in recent years. Gross figures by Cornell University in 1913-1926 from a large number of farms show an average of 3.3% on an investment of $16,968, with an average income of $858, allowing the operator only $299 for a year's work. The farms received 59% of the income from apples and peaches.

Bananas compete directly with all American fruits. All people need fruit and if the need is supplied by bananas they think other fruit is not necessary. The apple consumption per capita has decreased about 32% in the United States in the last 30 years, while banana imports have increased 500% since 1898. The increase therefore in banana consumption has taken place at the expense of American fruits.

The banana is a carbohydrate food and competes also with wheat flour, white bread, oatmeal, rice, potatoes, milk, cornmeal, etc., and caloric value can be purchased cheaper in the above mentioned foods than in bananas. Therefore, the American people would suffer no loss by reducing consumption of bananas.

The American fruits are better sources of valuable fruit juices, fruit acids and vitamine content than are bananas. Bananas are very ordinary carbohydrate food and the vitamine content is *below good* except for vitamine C.

American medical authorities claim bananas must show brown spots before they should be eaten without cooking, while few people wait this long. Therefore, most of them are eaten before they are ready. They are not easily digested by all people. They are not recommended by medical authorities for all children. They show 35% waste in the skin which no American fruit shows.

We produce some bananas in the United States territory and therefore, a tariff on bananas is far more justifiable than tariff on spices or many other things of no food value.

A slight increase in the price of bananas will be a hardship to no one and the revenue will decrease taxation of which practically the entire benefit will go to city people. A duty will increase the buying power of the fruit industry in the United States and stimulate purchase of manufactured goods.

You can't help the farmer without slightly increasing the price he receives for his product. Here is one way that will help.

The figures stated in this article are taken from a brief presented to the Ways and Means Committee by the National Horticultural Council.

Hubby: "Why are you angry with the doctor?"

Wifey: "Just think! When I told him I was awfully tired he asked to look at my tongue! Think of it, my tongue!"

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S.H.S., Madison, Wis.
Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

OUR COVER PICTURE

"Peter III"—An Outstanding Feature of The International Flower Show, New York City. Shows Young Peter Henderson, grandson of the famous Horticulturist, with "Peter III", the magnificent new Tulip and named after him by its exhibitor.

—Photo by Underwood and Underwood.

Boss (mad): "Look here! Two quarters are missing from my desk and you and I are the only ones who have a key. What about it?"

Office Boy: "Well—let's put in a quarter each and say nothing more about it."

COMING EVENTS

A NUMBER of horticultural meetings will be held this summer by the Horticultural Society which will be of interest to all of our members.

The state-wide strawberry and raspberry growers meeting will be held at Warrens this year just preceding the ripening of the strawberries. A similar meeting held at Sparta last year was very successful, 187 people attending.

It is anticipated that the Warrens meeting will attract growers from different sections of the state.

Prominent out-of-state speaker will be present to talk on commercial berry growing and several of our leading growers will discuss various problems.

A similar meeting for northern Wisconsin is being planned at Bayfield or Washburn just preceding the strawberry ripening period.

Our state tree fruit growers meeting will be held at Sturgeon Bay this year. The Minnesota Horticultural Society has been invited to meet with us. It will be held just previous to the ripening of the cherries. Quite a large number of the Minnesota people are expected to make the trip and it is hoped that the Minnesota and Wisconsin growers will become better acquainted.

The date of Arbor Day, which is set every year by the Governor, is to be Friday, May 10th, this year. We hope that a determined effort will be made on the part of our members to see that appropriate plantings are made on the school grounds of their community. Nothing will so improve the appearance of school grounds as appropriate planting of trees or shrubs. Let us give our children an opportunity to enjoy a few natural beauties during the years they are in school.

STATE FLOWER SHOW

Just as we go to press the Loraine Hotel, Madison, makes a splendid offer to the Garden Club Federation for holding the State Flower Show in the hotel. The officers of the Federation will meet in a few days to decide upon the show. Announcements will be sent to the garden clubs by letter and detailed announcements made in the May issue. Each garden club should help to make this show a success.

PAYS TO COVER RASPBERRIES

WE HAVE just received a bulletin entitled "Raspberry Diseases in Iowa" by the Iowa Agricultural Experiment Station at Ames, Iowa.

A paragraph is devoted to winter injury. Even in Iowa it is recommended that the plants be either partly or entirely covered with dirt to prevent winter injury, because the tips of the canes are often injured in winter. The bulletin says:

"Since the wood that is designed to bear the fruit is nearest the tip of the cane, it frequently happens that winter injury is responsible for crop failure. Such dead or injured wood afford a splendid point of entrance for wound parasites which continue the destruction of the living wood. Thus we often find the disease called 'cane blight' occurs as a follower of winter injury throughout Iowa."

If it pays to cover the canes in Iowa it will pay to do so in Wisconsin.

Varieties of raspberries differ as to soil preference. The Cuthbert usually does better than Latham on sandy soil while Latham does better on heavy soil.

Poor drainage is especially bad for raspberries.

SPRAY YOUR RASPBERRIES

THERE are a number of serious diseases of raspberries for which the grower should spray before the green leaves begin to show. Anthracnose, leaf spot, and cane blight can be controlled by spraying with lime sulphur now. It should be used at the rate of 1 gallon of liquid lime sulphur to 9 gallons of water, used as a dormant spray. When the young shoots are from 8 to 10 inches high, it might be advisable to apply a second spray of lime sulphur at the rate of one gallon to 40 gallons of water.

SPRAYING TREES AT NIGHT

NIGHT spraying by sprayers equipped with acetylene lights often give better conditions for spraying than does spraying by days. There is usually little or no breeze at night and temperatures are more comfortable for work.

In large orchards using a day and night crew it enables the owner to utilize his machinery to better advantage, increasing the operating hours per rig and decreasing overhead cost in spray machinery.

Many orchards have failed to time their spraying application correctly. Some are put on too early and some too late. Night spraying partly overcomes this.

WILD ROSE LEADS FOR U. S. FLOWER

Washington, D. C.—The wild rose has passed all other flowers in an effort to determine the most popular American wild flower. Of 115,011 votes cast thus far in a nation wide campaign the wild rose leads with 43,527.

The columbine is next with 19,315 votes and the goldenrod third with 13,510. The goldenrod is one of the flowers in which Thomas A. Edison says he will find rubber.

Campaigns are on in twenty-one states through women's clubs and schools.

A NEW book entitled "Starting Early Vegetable and Flowering Plants Under Glass", by Charles H. Nissley has just been received from the Orange Judd Publishing Co., New York City.

It contains details of construction and heating, as well as the operation of small greenhouses, sash houses, hotbeds and cold frames for the amateur as well as the commercial grower. It contains interesting chapters on soils for plant growing, seed sowing and care of young plants, transplanting, construction of different types of greenhouses, including the home-made types, insect diseases and their control and special information of certain varieties of both vegetables and flowers.

WE HAVE just received the yearbook of the New England Gladiolus Society which contains many articles by leading experts in the gladiolus world with stories of interest to the amateur, the professional growers and experimental work for the student. It is richly illustrated with colored plates of many of the leading varieties of glads. The year-book is published in the interest of the members of the Society, the annual dues being $1.00 per year.

Anyone interested should write to Secretary A. C. Scott, 93 Grand Street, E. Weymouth, Massachusetts.

THE Minnesota Horticulturist published by the Minnesota State Horticultural Society has been greatly improved in quality during the past few months, by the use of some very fine pictures and also some very interesting articles. Secretary R. S. Mackintosh is to be complemented on his good work.

Some of our members may wish to join the Minnesota State Horticultural Society and receive this magazine as it contains articles of interest to both Minnesota and Wisconsin growers.

AWARD FOR HOME IMPROVEMENT

THE President of the Massachusetts Horticultural Society has donated the sum of $1250 to provide the income for a gold medal to be given the resident owner who improves his home the most of any in Massachusetts. The award will be based on photographs taken before and after, submitted to the trustees of the Society who will make the award.

"The race in America today", says President A. C. Burrage, in making the offer, "is between the dreary apartment houses of New York and the bungalow homes of California with their porches and gardens."

He also makes the suggestion that greater special recognition be given to the grower or gardener who produces superior plants.

BRIDGE GRAFTING TREES FOR RABBIT INJURY

IT WILL be necessary to graft a lot of Wisconsin apple trees this year for rabbit injury if the trees are to be saved. We recommend that farmers who want information on the subject see their County Agent. Perhaps he has a copy of Farmers Bulletin No. 710 entitled "Bridge Grafting of Fruit Trees", in his office, and can give you a demonstration on how to do the work.

"How To Save Girdled Trees" is a new stencil bulletin written by Prof. J. G. Moore of the University, Department of Horticulture, and may be obtained by writing the College of Agriculture, at Madison, Wisconsin, and asking for stencil bulletin No. 75 with the above title.

It describes in detail how to treat trees which have been girdled by rabbits or mice and how to do bridge grafting.

About the Home and Garden

MRS. C. E. STRONG, Editor, 80th and George St., West Allis

THE ROCK GARDEN

In every cranny and corner of boulders and ledges
Holding a handful of earth, cupping the rains,
Glows with the star-gold of Poverty-grass to the edges
Patterned by crystal white quartz in a network of veins.

Sedums with roseate flower-stalks close together,
Smiling with joy from the rocks warmed with the sun,
Tied to the tiniest cracks by the myriad tether,
Threaded by rootlets that tirelessly twisted and spun.

Here from a shelter of deepening soil, in a hollow
Forming a pool after rain, misty with blue,
Wreaths of for-get-me-nots clamber, essaying to follow
Emerald fingers of gilt-studded Wandering-Jew.

Bergamot-mint, pennyroyal and hyssop are fragrant
Crushed by a footprint; here spurge, bee-balm and rue
Hem the blue larkspur and cinnabar lychnis; while vagrant
Humming-birds quivering whirr by the bees, velvet crew.

Candytuft umbels in niches and crevices straying
Broider the terrace in mauve, purple and rose;
Fringing the rocks of a pathway, the clove-pinks are spraying
Orient perfume, as heat in meridian glows.

Garden of boulders, with color kaleidoscope spilling.
Murmur unceasing where drone pollen-thighed bees;
Scent of the chalices amber-sweet honey is filling;
Garden with tang of the sea on the fog-laden breeze!

—May Folwell Hoisington.

"There are only fifty-two days in the year that should not be selected for pruning apple trees and those are Sundays," says County Agent Lathrope of Kewaunee County.

A FEW ANNUALS. WHEN AND HOW TO PLANT

Larkspur—(How) Sow thinly in well prepared ground, in shallow drills, preferablv a cool moist soil. Thin to 6 inches apart when well started. These plants can be placed in vacant spots where you need fillers. (When) Sow outside as soon as ground can be worked in spring. Can also be sown in cold frame and transplanted where wanted.

Scabiosa—(How) Sow rather thinly a half inch to an inch deep according to soil. Thin to four to six inches apart. (When) Early spring, same as Larkspur, they need the cool moist soil for real satisfactory plants and blossoms.

Centaurea, Bachelor button, or Cornflower—(How) Sow in any good soil, moderately thick. There will be plenty of flowers to cut and some to go to seed, for which the little yellow birds will thank you. (When) As early as possible in the spring, and at intervals of two or three weeks until late June.

Calendula—(How) Sow in rich soil where they are to stand. (When) As early as you like and avoid frost.

Poppies—(How) Make shallow sowings where the poppies are to stand, in well prepared soil, thin to 4 or 6 inches apart. (When) Sow very early in spring and at intervals of two weeks for 5 or 6 sowings. Poppies in late fall are very attractive.

Phlox drummondi—(How) Sow in well prepared soil, in sunny spot, either in beds or where it can be transplanted. Annual Phlox is one of the most satisfactory annuals, both for bedding and for cutting.

Petunias—(How) Choose rich soil and a sunny spot. Petunias need care until they have a good start—then they will grow like weeds. Nothing more satisfactory for a show all summer in the garden. (When) Sow after weather is settled outside, or sow in April in box or cold frame and transplant.

Snapdragon—(How) Sow in mellow soil, barely covering the seed. Press down firmly and keep moist, either in cold frame or in the open ground where they are to bloom; thin the plants to 6 inches apart and keep well cultivated. (When From April to June. The early sowing will give more bloom, but June sown seed will give lovely specimen spikes late in the fall. Masses of one color are very effective, also very satisfactory for cutting.

Salpiglossis—(How) Sow in mellow rich soil, barely covering the seed. Press down firmly and keep moist, either in cold frame or in the open where they are to bloom. Thin so plants are not crowded and keep the ground well stirred up. (When) Early sown seed does best usually, as plants grow stronger, April and first two weeks in May. Salpiglossis are showy in the garden and attractive as cut flowers, lasting well in water. The one fault is the odor, which is not at all agreeable early in the morning.

Gypsophila, Baby's Breath—(How) Sow in shallow drills in a warm sunny part of the garden. (When) Just as soon as possible for the first sowing. Every 2 weeks after that if you like a plentiful supply of the misty blossoms for bouquets. A very small space will, if planted rightly, give plenty of flowers. I have planted the seed from the first crop, for the last sowing in August.

NOTES FROM ANOTHER GARDEN BOOK, 1928

February 28—Seeds came today from England—Potential beauty in each little envelope.

March 1—Planted Viola, Campanula Persicifolia, and Snapdragon seeds today. Must test some of the English seed left from last year. (Later, Salpiglossis seeds came up as thickly as they did the first year, Nemesia seeds evidently lost their growing strength.)

March 3—Sowed Scabiosa seeds. Scabiosa plants need an early start for midsummer bloom. And aren't they gracefully lovely in flower?

March 7—Today Viola seed No. 1 became a plantlet, it is the first seed to sprout of the sowing of March 1. My "called by courtesy" greenhouse room is fast becoming a room of growing interests.

It has two west windows not shaded by trees. Seedlings seem to do well in this light.

March 9—The Snapdragon seeds are sprouting, I can just vision the picture they will make—planted with African Marigolds, orange and lemon colored, for a background, Montbretias in various shades, Hunnemannia and the saucy little yellow Johnny-Jump-ups for an edge—a veritable sunshine group.

March 20—Campanula Persicifolia seeds coming, the seeds are very tiny. It germinates, apparently, very slowly.

March 25—Found my first blossom —snowdrop—; Left it in the border. At night it rained, and by morning it was snowing and snowdrop was soon covered with a drift several inches deep. The drift disappeared by March 31. Snowdrop was picked and taken in the house. The delicate petals were unharmed and unfolded almost immediately in the warmth of the room. It lasted nearly a week.

April 5—Daffodils sprouting. Am anxiously waiting for Weardale Perfection sprouts, (water and ice covered the group for sometime.) I do so dote on this Daffodil's frilly butter and cream colored blossoms. Columbines coming thriftily. Canterbury Bells and Digitalis plants all winter killed.

April 28—Planted Doronicum, Phlox Divaricata (Laphamii), Heuchera (Alba), Jersey Gem Viola plants today.

May 1—Scillia patch is as blue as blue can be. Don't the honey bees love them? This afternoon Daffodil No. 1—(Emperor) broke its sheath and showed the beauty within.

May 5—Sowed Viscaria seed in the border. The purple Pumila Iris is proving a lovely edge for Daffodil blooms.

May 9—Planted out of door the seedlings grown in the house (once transplanted). They are strong looking plants.

The Narcissi have been more than lovely this spring. The Leedsii and Barri groups with their starry blooms are particularly attractive. Sea Gull (Barrii) has grace and delicacy beyond measure. Conspicious is golden and fairy like and Evangeline is dainty. Glory of Leiden (trumpet) had huge blooms. We measured one. Its perianth was 4¾ inches in diameter, its trumpet 2 inches long. The texture of its flowers was lovely. The group of Kaiserkroon (early) tulips with background of big boulders and tender green currant foliage is captivating.

May 11—Planted Sweet William seed (giant white and salmon pink varieties out-of-doors today, also spaded the long border and re-set Dianthus group. This is its third year. The plants came through the winter in vigorous condition. (Later, they gave abundant bloom, also.)

May 20—Rare spring day. Tulips can almost be seen growing. Nearly all the Darwin and Breeder varieties have opened and the glory of color beggars description. Speaking of color—this morning as I came downstairs, my eye seemed to catch a gleam of scarlet. When I reached and looked from the window saw Scarlet Tanager sitting on the door-step. Just the color of a blazing Tulip. Lily flowered Tulip, Sirene, in masses, is a picture. Louis XIV and King Harold (tulips) named for royalty and robed in royal colors make a thrilling combination.

June 22—The garden is, to me, as lovely right now as it has been at any time this spring. Not as cheery, perhaps, as in Daffodil time, surely not as riotus in coloring as in Tulip time; but the orchid, white and golden shades of the Iris, with white Sweet Rocket, yellow bachelor's buttons and Columbines in all the soft and delicate shades, combine to make it very appealing. The grace of form and airy poise of the different flowers add to the beauty of the picture.

A very charming group came into being without method. Several plants of Oriental Poppies were placed next to Siberian Iris (an old variety the name of which I could not learn). The poppy blooms are red orange in color. The Iris blooms are lilac purple in hue. The combination is a dream of beauty.

July 5—Delphinium now dominate the garden; its great spikes are marvels of form and coloring. Tried planting yellow Primulinus Glads among the Delphiniums. Had read this suggestion and, as it sounded

Grow Your Own!

What can be more delicious than FRESH FRUIT on the table every day? Our PLANTERS GUIDE AND CATALOG tells how you can grow your own and save money.

Send for your copy to-day. Its free.

NORTH STAR NURSERY COMPANY
Box A-5682 Pardeeville, Wis.

Farmer Brand Seeds Grow

THERE are new tested varieties listed in our 1929 Catalog which may double and triple your crop income. See this wonderful new book before you buy a seed. 80 big pages, handsomely illustrated, and describing all of our northern-grown, purebred Grains, Seed Corn, Clovers, Alfalfa, Vegetables, Flowers, Berry Bushes and Fruit Trees. Farmer Brand Seeds are guaranteed 99% pure. Remember we sell at low, direct-from-grower prices; a big saving for you! Mail the coupon!

Farmer Seed & Nursery Co.
100 First Ave. Faribault, Minn.

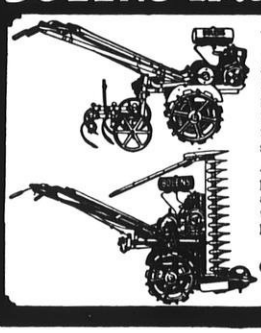
Farmer Seed & Nursery Co.
100 First Ave. Faribault, Minn.

Please send me your free 1929 Seed Catalog. I am interested in:

☐ Clovers ☐ Alfalfa ☐ Garden Seeds
☐ Seed Grains ☐ Flower Seeds
☐ Seed Corn ☐ Nursery Stock

Name.....
Town.....
State..... R.F.D.....

BOLENS Tractors *for Small Farms and Gardens*



MOTORIZE your garden plowing, harrowing, seeding, cultivating, spraying, lawn mowing and field mowing. All it needs is a guiding hand. Gasoline power does the work with great saving in time and energy. BOLENS is built in two sizes, model DJ for gardeners, florists, estates and others—a light machine for extremely accurate work. Model IQ with heavier motor, two speed drive and gear shift—for suburbanites, small farmers, poultry men, bee keepers, nurserymen, etc. All BOLENS tractors have vital and distinctive features—patented high arched axle for clearance and vision, a simple and natural tool control, double clutch drive with power turn, an instant hitch for quick change of implements, off set handles and other advantages. Thousands already in use.

Write today for complete catalog and time payment plan.

GILSON MANUFACTURING CO.
881 PARK ST. PORT WASHINGTON, WIS.

very alluring I followed the advice. But evidently there was not light enough, for the Glads did not send up any creamy yellow spikes to blend with the gorgeous blue spikes. Experience proves the value of suggestions. And so on—.
—From the Elkhorn Garden Book.

And we wished as we read, that the writer had gone on and on—we want to know if those choice Daffodils survived the ice and water, we want to know what was blooming in the garden in August and September—even to late fall. We would like to know just how the writer cared for those seedling plants. We are sure there are many more color combinations jotted down in this Garden Book that would help some beginner and make them happy.

In fact I am quite positive there are many Garden Books among the readers of Horticulture, whose contents would prove very helpful to many a gardener this spring. Why not share with us? Never fear that the waste basket will be the destination of "Garden Notes". Just as you enjoy reading about some one else's experiences—so that someone enjoys your tale, tries your methods and color combinations, feels confident that your choice of bulbs will do for her garden and can be planted without a fear of having made a wrong choice.

WISCONSIN CRANBERRY GROWERS MEETING

A letter from Clare S. Smith, Secretary of the Wisconsin State Cranberry Growers Association states that the next annual meeting of the Association will be held the second Tuesday in August in the pavilion between Port Edwards and Nekoosa. A large number of cranberry growers will no doubt attend and anyone interested is welcome.

The cranberry growers of the state are well organized and very much interested in the cranberry industry.

Wisconsin Cranberries

C. L. LEWIS, JR.,
Beaver Brook, Wisconsin

WISCONSIN produced a cranberry crop of approximately 45,000 barrels in 1928. The term barrels is a misnomer however, as cranberries are now shipped in 50 pound and 25 pound boxes, commonly known as half and quarter barrel boxes. Due to the fact that the 100 pound barrel was the only unit of sale prior to the last few years, the crop is always stated in terms of barrels.

Although Massachusetts and New Jersey lead Wisconsin by a considerable margin in cranberry production, Wisconsin has taken rapid strides forward in the last five years. Cooperation by the State Department of Agriculture has led to Federal Cooperation and with this combined assistance the cranberry growers are attacking their problems with intelligent and persistent effort.

A few of the problems that face this group each year, any one of which, if not properly handled, might lead to crop failure, are as follows: loss by frost during the growing season, damage by insects, disease, water control, weeds and grasses, and improper methods of harvest, storage and sales.

The loss by frost or freezing is greatly reduced by Government assistance in the form of frost warning service, which is supplied by wire and by radio, under the Chicago office of the U. S. Weather Bureau.

Insect control and cultural methods are the main subjects of State aid. Cooperation by the State Department of Agriculture is saving thousands of dollars annually for the cranberry growers of Wisconsin.

The Federal Government is chiefly concerned with the diseases and storage rots of the cranberry, and it is now engaged in a program, that promises much needed relief from losses due to these sources.

The cranberry industry in Wisconsin is peculiar in that it utilizes land that is of no value for other purposes. The investment per acre is high and the returns to the State in taxes are many times the modest sum expended by the State in assisting this industry.

The cranberry growers have solved their own marketing problem. The American Cranberry Exchange is a strictly cooperative organization operated by the growers themselves. About 70 per cent of the entire production of the United States is sold through this organization. It has been outstanding in its success and through its operation and through its national advertising of "Eatmor Cranberries", it has done more than any other factor to stabilize the industry.

This fact, that the growers have done so much for themselves, has been of great value to them in securing State and Federal aid on their cultural problems. It brings to mind the old and true expression often heard, "God helps them who help themselves".

NURSERY STOCK
Ornamental Shrubs
Perennials Annual Plants
Evergreens Shade Trees
FRUIT TREES
Berry Plants
We specialize in landscaping and tree surgery
SCHMIDT NURSERY & LANDSCAPE SERVICE
Madison, Wis.
Fish Hatchery Road
Tel. Oakwood 42R4

THE NEW HOME OF THE CARDINAL

WHILE west central Wisconsin is not really in the Banana belt, at least during January 1929, yet we seem to have faith in being able to compete with our more southern sister states. Since January 1st, and it is now February 10th, my wife and myself have had the thrill of our lives entertaining two pair of Cardinals each day from early morning until twilight. Scarcely an hour has passed without one or more Cardinals visiting one of our feeding boxes, one box located on our sun-room window sill and the other twenty feet away.

They were first attracted to the Beta Grape Vine covering the fence at the rear of our garden. This Vine bore heavily and only a part of the fruit was gathered and they fed on these until snow fell (which was about January 1st).

Having read considerable about the Cardinal's habits we placed ears of yellow corn near our house, also near a very large Wild Grape Vine covering a fence, a large Elm tree and a Rock Garden forty feet square in a corner between the garage and fence. This gives them protection from marauders' eyes, which they require on account of their brilliant plumage.

Trying to make friends with them, we placed first, perfectly dry earth in the bottom of the feed boxes, then clam shells filled with cracked corn, oats, barley, buckwheat, chopped suet, sunflower seed and grit. This seemed to fill the bill with the result that they have been our constant boarders.

The feed is taken in each night and kept warm and returned each morning at daybreak. The feed boxes are protected with covers which gives protection from snow, Sparrows and Blue Jays. The hinged covers are handled by strings from the sun-room which gives the boxes the appearances of a trap to birds not wanted, with the result that undesirables do not bother often.

With plenty of feed to their liking they seem to be perfectly contented with the temperature of 25 to 30 below zero as only this morning at 22 below they were with us for breakfast at daybreak in all their glory.

It appears that only in very recent years have they ventured north of Illinois and Iowa, but we believe that with extra good winter care, our Putnam Park for protection and open water, that we can make them permanent residents of Eau Claire.

MR. & MRS. F. T. BRUNK,
335 Summit Avenue,
Eau Claire, Wis.

YOUR SPRAY

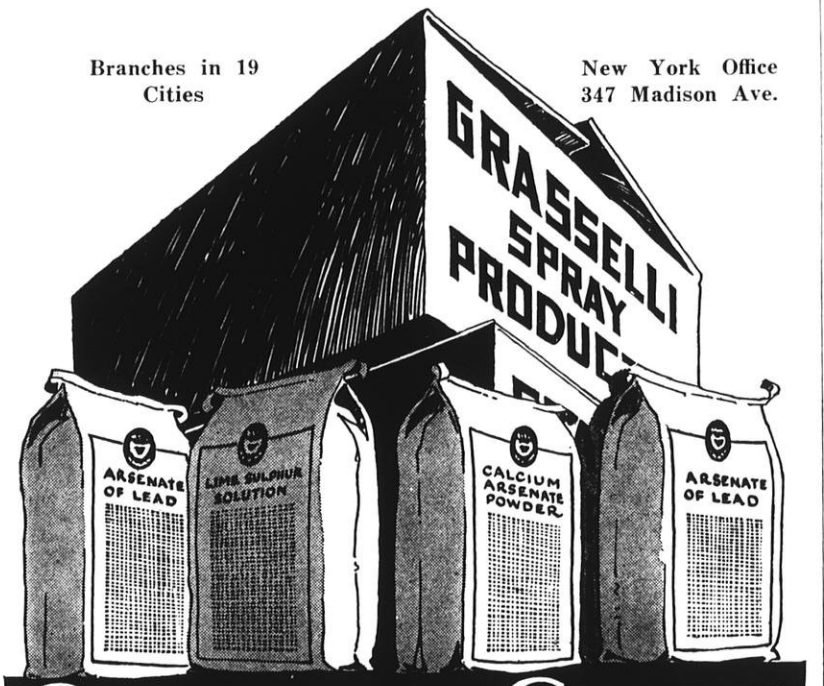
Slighting it Imperils Your Whole Crop "Chain"

You have money tied up in your orchard and your spray rig. And certainly labor represents a heavy expense item.
Don't imperil the whole investment by experimenting with unknown and untried spray materials. For your "mix" use GRASSELLI Insecticides and insure **certainty.**
This is of major importance because spraying is unquestionably the most important thing the grower does to insure the maximum of first grade fruit.
There's a Grasselli dealer near you. If you don't know his location, write us.

THE GRASSELLI CHEMICAL CO. Inc.
CLEVELAND

Branches in 19 Cities

New York Office
347 Madison Ave.



GRASSELLI GRADE
A Standard Held High for 90 Years

State Garden Club Federation News

MRS. R. L. MALISCH, President Hales Corners
MRS. C. W. VAUGHAN, Vice-president Madison
MRS. A. W. SPERBER, Sec'y–Treasurer Hales Corners

What Standards for Flower Shows?

JAS. G. MOORE

THE three blind men, after examining the elephant, all had a different definition of it. Lovers of flowers probably would vary as much in their ideas of what constitutes a flower show. Of course, these differences are due merely to different points of view. To determine what our flower show should be, necessitates our defining in our own minds what we desire to accomplish. Then we can make our premium list and our basis of awards such as will be most likely to produce the desired result.

Obviously there can be only two fundamental bases of award: Degree of perfection in the product and degree of perfection in its use. These may be combined, giving us a third basis. Seldom, if ever, is the second used alone. Therefore, what we really have as the foundation upon which our premium lists are developed is first, a consideration of the degree of perfection of the product (flowers in this case) and second, a consideration of the degree of perfection of the product and the degree of perfection in its use.

The premium list of a county fair is largely built on the first basis. The judge is expected to consider only the relative merits of the competing exhibits as regards which are the most nearly perfect specimens of roses, dahlias, asters, or other flowers for which the prize number calls. Of course, in reaching his decision he takes into account not alone the flower proper, but the character and length of stem, the amount and

character of the foliage, and any injuries, either mechanical, insect or disease, which the specimen may have sustained.

Higher Plane for Garden Club Shows

The premium lists of many flower shows differ little from those of the county fairs. I think we will all admit that the flower show of a garden club should be on a distinctly higher plane. To accomplish this, the garden club must shift the emphasis in the factors taken into consideration in making the award. Garden clubs should particularly stress the development of greater skill in floral composition. In other words, in order to improve the character of flower shows, the basis of award should not be merely perfection of the individual flowers, but large consideration should be given to the skill and perfection which the exhibitor has attained in the arrangement or use of the flowers making up the exhibit. For example, the prize number should not call for "Best asters, 12 blooms", but rather for "Best bouquet of asters" which would mean that something more than just flowers was to receive consideration in deciding the winner.

As a rule, a few prize numbers in our county fair lists emphasize this phase of flower exhibits. We have for example, "Best and most artistically arranged center piece" and two or three other somewhat similar prize numbers. I believe that in the garden club's premium list, every prize number should emphasize the exhibitor's skill in the use of flowers, except perhaps in those in which the object is to compare the merits of particular varieties or in the exhibit of collections.

There is need of reform in the exhibiting of collections. In the prize number "Largest and best display" there has been so much emphasis placed on "largest" interpreted many kinds, and so little on "best" that not infrequently the exhibits are of little or no value in making a real flower show. Even in collections, then, limiting the number of kinds to be shown, stressing quality more and placing some weight on the skill with which

the flowers are displayed would do much in improving the character of many a show.

But a flower show is not necessarily confined to bouquets and other floral compositions. Almost any garden club could stage and profit by competition in table decorations or flowers used for other special purposes. The more ambitious clubs might even aspire to competitive garden design. This might even lead to the design of special types of garden.

And so our flower show grows in size and difficulties; limited only by the enthusiasm and ingenuity of the club members and the funds available for staging it.

Possibly a word or two of precaution is appropriate at this point. It is usually best to develop rather gradually. A little show well staged is better than a larger one which is a failure.

Be definite. Decide what you want to do and then put your best efforts into accomplishing that result.

Don't fail because your judges are not qualified. Competent judges may differ in their decisions, but an incompetent judge can c o n t r i b u t e nothing but trouble to a show.

A flower show should be educational. The worth-while exhibitor is the one who is striving to improve through doing. If he loses, he is not so much concerned that he lost, as he is why he lost. He has the right to know why he lost so that he may avoid the same mistake the next time. Have your judge explain why he placed the awards as he did. Done in the right spirit, this is not criticism of the judge, but an honest attempt to learn. You may not agree with the decision even after the explanation is made. After all, many things are matters of opinion. Often, in close competition, a decision may rest on relative values of different factors which two competent judges might not rate alike, thus causing directly opposing decisions. Supposing, for example, that two exhibits are equally worthy in all respects except that one falls down in color harmony and the other in congruity. One judge might feel that poor color harmony was more serious than lack of congruity. Another judge might have equally as pronounced views that lack of congruity is a more serious defect than lack of color harmony. Their decisions would be in conflict. Your opinion of which judge was right would be determined by the way in which you respond to violations of color harmony as compared to violations of congruity.

But this difference of opinion, brought out by an explanation of the reason for the award, causes us to consider more critically our own position, and helps us to become more proficient in attaining the standards of perfection which we have set for ourselves.

THE GARDEN CLUB MOVEMENT

NEW garden clubs are being organized very fast. During the past month clubs have been started at Hartland, Jefferson, Oconomowoc and Appleton. Ft. Atkinson had their first meeting on April 4. We have also heard of two new clubs in Milwaukee.

Wisconsin has been somewhat behind a few other states in this movement but at the rate we are going we will soon catch up.

The Horticultural Society is making every effort to get together high grade sets of colored lantern slides on the subjects of annuals, perennials, wild flowers, landscaping, peonies, iris, gladiolus, rock gardens, etc. It is a rather slow and difficult task to get together good sets of colored slides and quite expensive. Nevertheless slides are of great value in giving talks to garden clubs.

It is hoped that when the slides are available, funds will permit a representative of the Garden Club Federation, Horti-

GLADIOLUS
CHOICE VARIETIES

50 bulbs 1" up, or 100, ½" to 1", or 250 under ½" or 1,000 bulblets, at least 20 varieties, labeled, for $2.00.

Fine mixed, large flowering, or primulinus: 50, 1" up, or 100, ½" to 1", or 250 under ½" or 1 pint bulblets for $1.00. All prepaid.

HARRY F. MEREDITH
Box 483 Union Grove, Wis.

Dahlias—Gladiolus—Perennials

4 good Dahlias (named, labeled)	$.75
100 Gladiolus (1 inch, assorted)	1.00
1 doz. perennials (assorted, labeled)	1.25
Or, entire list above, postpaid for	2.25

May we send you our price list?
DEWALT'S FLAMBEAU RIVER GARDENS
Ladysmith, Wisconsin

Send $1.00 for
1 Mt. Ash, 7 ft., or
4 Bridal Wreath 2–3 ft.
DAHLBERG NURSERIES
Ladysmith, Wis.

Olds' Seeds
4 New FLOWERS
LaFrance Larkspur. Outstanding flower novelty of the season. An annual. Large, double flowers. Pkt. 25c.
Campfire Calendula. Largest flowers of any variety yet introduced. Brilliant orange. Pkt. 20c.
Carnation Flowered Petunia. Resembles carnations. Deep rose color, very double. Pkt. 30c.
Crimson Monarch Dahlia Flowered Zinnia. Largest, most showy of all Zinnias. Pkt. 20c.
Order any one of these 4 wonderful new flower creations and we will include a 20-cent packet of Olds' California Giant Double Aster, without charge, if you mention this paper.
42nd ANNUAL CATALOG
A 96-page illustrated book of Field, Garden and Flower Seeds, including Bulbs, Plants, Shrubs and Trees, Tools, Fertilizers, Insecticides, Poultry Supplies, etc. Ask for a copy.
L. L. OLDS SEED COMPANY
Drawer 6 Madison, Wis.

cultural Society or both, to give an illustrated talk to each of the affiliated clubs in the state once each year.

The editor has been corresponding with a number of national organizations and garden club federations in an effort to get joint action in building up sets of slides. A lot of money and effort can be saved by cooperation on this project.

Summer meeting of the Garden Club Federation

The officers of the State Garden Club Federation are anxious to hold a summer convention and flower show for garden clubs this year. The difficulty is to get a suitable location. Such a convention and show will cost considerable money which the Federation does not have at this time. The plans are to make the show of real quality and to have speakers who are experts in their line and whose talks will be of special interest to garden club members.

The show would not only consist of classes of flowers in bloom at the time the show was held but also shadow boxes, table decorations, miniature gardens, etc. Emphasis would be placed on quality and arrangement in all cases.

To put on a show of this kind it would be necessary to charge admission to help pay the expenses, premiums, premium ribbons, etc.

What the Garden Club Federation is looking for is a place suitable for this proposition in a location in which they could draw a good crowd. In most cases halls in which admission could be charged also charge a high rental, making it almost prohibitive for the first show because we do not know what the results will be.

The officers of the Federation will welcome suggestions and invitations from communities in which the show might be held that could meet the qualifications.

MILWAUKEE SOCIETY HAS IRIS PROGRAM

F. B. COON

PRESIDENT SMITH made a plea for Mr. F. B. Coon, of plants that any of the members the West Allis schools, at the Feb. meeting of the Society, for any "cast off" bulbs and might have. These are to be given to the children of the West Allis School Garden Club members.

Mrs. Hopkinson read the Nature Poem, "Lilacs in the Rooming House District", by Edgar Guest.

The next meeting is to be Tuesday evening, March 26, with a Rose program under the direction of the Milwaukee Rose Society, in joint meeting.

The April meeting is to be a celebration of Shakespeare's birthday, April 23, Lilacs, Spireas and viburnums are to be the subjects of discussion.

Mr. Gutknecht began the program by discussing Bulbless, Japs and Dwarf varieties of Iris.

Mrs. Klingbeil concluded the discussion of Iris varieties by telling us of Siberian, German and Spanish Iris species and how best to grow them.

Mrs. L. Ruegg gave instructions about what to do when we received plants from the growers.

Miss Celia Dix gave detailed instructions of fertilizing, and soil preparation.

Mr. L. Burmeister explained his methods of planting, and resetting as well as how he divides the old rhizomes.

Mr. L. Potter closed the program by discussing Iris insect pests and diseases. (These papers will be published in early issues.)

A 20 minute discussion followed on whether Iris should be planted in the fall, (November) or spring. Mr. Potter contended that his experience proved late fall best, while Mrs. Strong told us a "hard luck story" of her losses in fall planting. Mrs. Jaeger told of her experience in growing iris from seed for use in her rock garden.

OSHKOSH SOCIETY MEETING

MISS FLORENCE WINCHESTER, Secretary

THE annual Oyster Supper of the Oshkosh Horticultural Society was held Monday evening March 4 at the Public Museum.

After supper the meeting was opened by community singing and a fine program was given.

The Society was favored with two vocal selections by Miss Gladys Oaks, who was accompanied on the piano by her sister Miss Marion Oaks. Professor Moore of the State University gave an interesting talk on a new project of farm-home-ground improvement contest. He emphasized the fact that there must be two scorings to make this a fair contest, one at the beginning of the season and one at the end. Then the one who scores the most number of points wins the prize.

A very interesting letter from Mr. James Roe was read by Mr. H. C. Christensen. He is spending the winter in Florida and told about his work in the garden and among the flowers on his estate.

PANSY PLANTS
Steel's Miracle Mixed Heavy young plants in bud or bloom.
50 cents per dozen, postpaid
SUNSET FARM
Eau Claire, Wis.

Hardy Northern Grown
Nursery Stock
Write for price list
ALBRIGHT'S NURSERY
Superior, Wis.

Grow our peppy sandgrown gladiolus. Have all size bulbs and plenty of bulblets. Closing out some choice varieties. Get a bargain on something you have been wanting to try.
Lilium Tenuifolium seeds, 500—$1.00. As easy to grow as beans.
The Far North Gardens,
Iron River, Wis.

and Flower Show held in Chicago. They gave us a very good report of nearly everything they saw. It surely must have been wonderful. A great many of us are enthused and hope to attend

BORDER PLANS DISCUSSED BY SUM-MER-DEL

THE March meeting of the Sum-Mer-Del Garden Club, held in the parlors of the Presbyterian Church, Delafield, was one of unusual importance. Every member brought a plan of a border eighteen by four feet, which should have continuous bloom. These were exhibited and criticized by Mrs. Hitz for relative height of plants, color combinations, succession of bloom, and general effect. Mrs. Day gave the calendar for March and early April, and Miss Moore continued her helpful and very instructive lessons on wild flowers, giving out a new set of cards, illustrating ten more spring flowers. Mrs. Henze, Mrs. Hassal, and Mrs. Hitz, who attended the Chicago Garden and Flower Show, reported some of the more beautiful and impressive features. An interesting paper on Winter Shrubs was read by Mrs. Chas. Smythe of Delafield. At the close of the meeting, refreshments were served by the hostesses, Miss Notbohm, Mrs. Smith, and Mrs. Passmore.

MILWAUKEE ROSARIANS HAVE ROSE PROGRAM

THE Milwaukee Rosarians furnished the program for the Milwaukee County Horticultural Society Tuesday evening March 25 at the museum.

Specialists spoke on every question the rose grower should know. Only actual amateurs can become members of either society. Mrs. E. Lefever of Wauwatosa contributed a rose poem; Mr. I. J. Schulte of 869 Fortieth Street discussed rose history and species; Herman Guthknecht of 313 Eighteenth Avenue discussed soils and fertilizers; Mrs.

FIRST PRIZE—AGAIN

Mr. de Jong's prize winning cauliflower at the Convention of the Vegetable Growers' Assn. of America, South Bend, Ind., Sept. 10-15, 1928.

for Mr. de Jong's

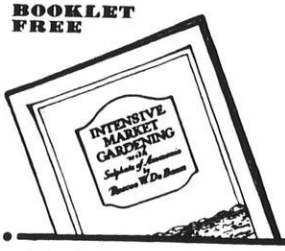
CAULIFLOWER

BLUE ribbon cauliflower is getting to be an old story for Mr. Klaas de Jong, of East Kildonan, Manitoba. His cauliflower has won again at the Convention of the Vegetable Growers' Association, held this year at South Bend, Indiana.

The Cauliflower Champion uses Sulphate of Ammonia, of course. The prize heads were cut from the field on which he used Sulphate of Ammonia at the rate of 200 lbs. to the acre.

Try Arcadian Sulphate of Ammonia on your own crops. The vegetables that fetch top notch prices at the market generally come from fertilized fields—truck farms where they use Sulphate of Ammonia.

BOOKLET FREE



ARCADIAN
Reg. U.S. Pat. Off.
Sulphate of Ammonia

The Barrett Company
Agricultural Bureau

Atlanta, Ga. Memphis, Tenn. Norfolk, Va. New York, N. Y. Cleveland, Ohio San Francisco, Cal. Toronto, Ont.

The Barrett Company (address nearest office) N-1-29 N J

Please send me free copy of "Intensive Market Gardening." I am especially interested in.....

(Write names of crops on line above)

Also send me free sample of Arcadian Sulphate of Ammonia.

Name.....

Address.....

KINDLY PRINT NAME AND ADDRESS

William Hopkinson spoke on the treatment of rose bushes, planting, pruning and the cutting of blooms; Dr. William Hopkinson discussed diseases and pest control; August C. O. Peter of Wauwatosa told how to protect roses during winter; Herman Koch of Wauwatosa spoke on understocks of dwarf and tree roses, and Louis R. Potter spoke on climbers and varieties.

HARTLAND GARDEN CLUB JOINS FEDERATION

THE Hartland Garden Club had a meeting at Hartland March 25th at which time they voted to join the State Garden Club Federation and Horticultural Society. The club is a new one, having just been organized during the past month. There are at present about 25 members. The club hopes to have some interesting programs and accomplish a great deal. The Secretary of the Horticultural Society has been invited to give an illustrated talk on Wild flowers, Perennials and Annuals at the April meeting.

HILLCREST CLUB MEETING

THE Hillcrest Garden Club of West Allis, met at the home of Mrs. Fahnstock 883—79th Ave., Monday March 18th. Meeting was called to order by the President Mrs. H. Hohberg.

As the regular Secretary was absent Mrs. Strong took her place. The Secretary then gave the Club report on the lecture to be given at the April meeting by Dr. G. J. Raleigh of the Swift Co. It was decided to hold the meeting at Mrs. Hohberg's and invite the West Allis Garden Club and as many others as could be accomodated in the Home.

Mrs Hohberg gave the Nature poem "Hollyhocks" by Edgar Guest after which there was a general discussion on "Annuals" we are going to plant this summer led by Mrs. Strong. Seedsmen were also discussed and praised or the reverse as the case warranted. Flower Shows and Why? came in for considerable discussion. All agreed they were worth while. Three new members were added.

The Secretary was instructed to write Mr. H. J. Rahmlow, Secretary of the State Horticultural Society in regard to showing a set of 70 colored slides on Wisconsin Wild Flowers.

—MRS. GEO. LEVERENZ,
Secretary.

WAUKESHA GARDEN CLUB ACCOMPLISHMENTS

Early in the spring the Waukesha Town Garden Club started a movement to plant trees on the roadsides. The Club contributed to this as individuals. There is a nice row of trees planted East of town and on a tract of land owned by the County. We wish there might be more trees planted on other roads in the vicinity of Waukesha.

Then the Club sponsored the planting of a large tract of land along a railway that is crossed by some of the most used streets in town. This was done by Mrs. Geo. Peterson with the help of the railway officials who kept the grass mowed and helped in other ways. The garden was very attractive and caused much comment. There are many such tracts all over town, as we have three railroads and a trolly line meandering through town.

Late in the summer we gave a Garden Show for the school children who had purchased seeds and shrubs for beautifying their home grounds. The show was very good and we shall attempt something similar this season. We gave prizes to each child exhibiting. These prizes were cheerfully donated by the merchants of Waukesha.

We see a change in some parts of town in regard to beautifying and keeping the home grounds attractive.

The garden question is growing by leaps and bounds, not only in the towns but in country places. Long live the ideals of the true gardeners.

—ELIZABETH ATKIN.

BETTER HOMES CONTEST

By the Horticultural Department, Wisconsin College of Agriculture

THE following is the plan for the Madison East Side Business Mens Association Better Homes Contest. Successful contests have been held by this Association for the past five years.

The form of this contest will serve as a suggestion to other communities in which such a contest may be contemplated.

This year, six distinct contests are suggested as follows:

No. 1. For homes started since Jan. 1, 1928. Awards will be based upon the condition of the building and the improvement of the grounds. In the latter, grading of the lawn, condition of the lawn, plantings, drive and walks will be considered.

No. 2. For homes started since Jan. 1, 1924, except those entered in Contest No. 1. Awards will be made upon the same basis as in Contest No. 1. It is expected, however, that the condition of the lawn and plantings in this contest will be much better than in Contest No. 1. (Those having received First, Second or Third prize in this contest in the past are not eligible to enter this year.)

No. 3, 4, and 5. Garden Contests. Open to all except those entered in Contests No. 1 and No. 2.

No. 3. Flower Garden—Open to gardens composed entirely of flowers.

No. 4. Vegetable Garden—Open to gardens composed entirely of vegetables.

No. 5. Combination Garden—Open to gardens composed of vegetables and flowers.

Explanation: A person whose yard has a section devoted to flowers and a section of vegetables is entitled to enter in No. 5, or he may enter the proper part of his garden in No. 3 or 4, but he may not enter in more than one contest.

Gardens on the same lot, although cared for by different members of the family, will be entitled to only one entry.

No. 6. Open to all. Best porch or window box.

Suggested prize money distribution: Contest No. 1—six prizes; Contest No. 2—ten prizes; Contest No. 3—five prizes; Contest No. 4—five prizes; Contest No. 5—five prizes; Contest No. 6—five prizes; Contest No. 7—two prizes.

In addition to the above prizes, a champion and a reserve champion garden will be selected from Contests Nos. 3, 4, and 5. The champion garden will be awarded a prize of $20.00 and the reserve champion garden $15.00.

Entrants in No. 1 should not be allowed to compete in No. 2 or the garden contests, as they should put all their efforts to winning in No. 1. We feel that the number of prizes offered in this class would well be reduced. Our experience last year was that with the larger number some awards were made which conditions scarcely justified.

Entrants in No. 2 should be limited to homes not over five years old. A home under that period of development should have reached a place where marked improvements would be very exceptional. They should not be eligible to the garden contests because their gardens would have been considered in Contest 2. Past winners of high prizes should not be eligible because we should encourage those less successful to improve sufficiently to reach a higher position.

Contests 3, 4 and 5. We experienced considerable difficulty last year in judging the gardens because of the wide differences in the types of gardens. We believe that the plan suggested this year will enlist greater support and will be more easily handled.

By awarding a championship and reserve championship selected from the three classes we have a fair basis for giving a more liberal prize than would be justified in any class and at the same time retain the same relative position for the garden to the other contests that you previously set.

Contest 6. We recommend this contest as we believe much can be done in improving appearances by using porch or window boxes. Then, too, one can get in on this improvement work by entering this contest whether he has a yard or not. We feel this contest sort of rounds out the plan. We are inclined to think that after a trial, you may feel inclined to give this contest a more prominent place in your plan.

NEW HARDY PERENNIALS

(Continued from page 234)

Two years ago, two new double Gypsophilas or Baby's Breath varieties were introduced, Bristol, Fairy and Ehrleii. They look to be of very similar origin. Growth is very much more rapid than with the old double Baby's Breath, the flowers are larger and best of all it keeps flowering practically all summer. The flowers while large are a little soft and it does not seem to dry as well as the old variety. Propagation must be by cutting or grafting on roots of the seedling Gypsophila paniculata.

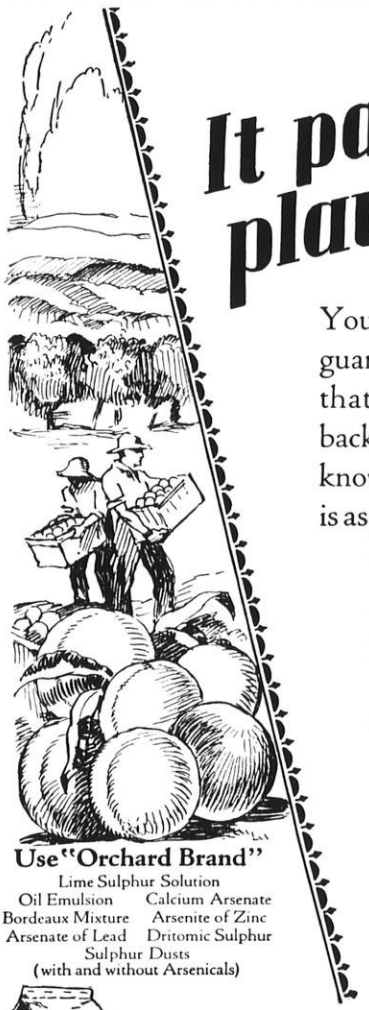
THE NATIONAL FLOWER

The contest to decide the National Flower is being conducted by the American Nature Association publishers of Nature Magazine, Washington, D. C.

A letter from Paul F. Hannah, assistant editor, states that our article in the March issue entitled "A National Flower" and favoring the Columbine was interpreted as coming from Mr. Hannah. This is not the case. Nature Magazine does not favor any flower and the article as stated came from the President of the Ormond Florida Garden Club.

Golfer: "My boy, do you know what becomes of little boys who use bad language while they're playing marbles?"

Small Boy: "Yes, sir; they grow up and play golf."



It pays to play safe

You're working now for a profitable crop at harvest time

You know that "Orchard Brand" is a guarantee of standard quality. You know that this Company's responsibility is back of "Orchard Brand" Products. You know that an "Orchard Brand" application is as potent a control as you can command.

You cannot afford to risk the quality and profit in next fall's harvest for a fraction-of-a-cent a pound difference in cost of materials. It pays to stick to "Orchard Brand."

You'll like the spray calendar in our "Cash Crops." Ask us to send your copy.

Use "Orchard Brand"
Lime Sulphur Solution
Oil Emulsion — Calcium Arsenate
Bordeaux Mixture — Arsenite of Zinc
Arsenate of Lead — Dritomic Sulphur
Sulphur Dusts
(with and without Arsenicals)

GENERAL CHEMICAL COMPANY
40 Rector Street, New York
St. Louis Los Angeles San Francisco
G C I-72

ORCHARD BRAND
REG. U.S. PAT. OFF.
SPRAY & DUST MATERIALS

ORCHARD BRAND SPRAY and DUST MATERIALS

COUNTY AGENTS IN HORTICULTURAL WORK IN WISCONSIN

J. F. WOJTA

COUNTY Agents in Wisconsin conducted 1,108 demonstrations in various phases of horticultural work, during 1928. Chiefly among them may be mentioned work with tree fruits, brush and small fruits, grapes, market gardening, truck and canning crops, home gardens and beautification of home grounds.

Calls were made upon county agents to demonstrate methods of pruning and spraying orchards; to recommend best fruit varieties to plant under given conditions; to help in organizing cooperative marketing of fruits; contests on home grounds beautification; exhibitions at fruit shows, organization of boys and girls clubs in market and home gardening and other related lines of effort.

It is of interest to note that three-hundred and eighty (380) boys and one-hundred and fifty-one (151) girls completed their 4-H club work in horticulture during the past year. About sixty (60) acres of land were devoted to this line of effort, representing an estimated yield of 7,300 bushels of fruit. The interest centered chiefly around the managing of home gardens, canning and truck marketing gardening. This shows intensive form of an extension activity in that only a small portion of an acre is taken care of by each junior member.

Not only are farmers in Wisconsin becoming more and more interested in growing fruit, but they also desire to grow better quality stuff. This they have shown by the fact that 851 farmers pruned their orchards for the first time or a total of 13,900 acres, 854 farmers have also sprayed or treated their fruit for diseases and insect pests for the first time which represented nearly 5000 acres last year.

The Milwaukee Flower Show

The Milwaukee Florists Club held their 14th annual flower show in cooperation with the Milwaukee Home Show this year at the Auditorium, March 16-24. The flower show was a big help in advertising the Home Show and a crowd of about one hundred thousand attended.

The two chief attractions were the great circular groups of Amaryllis grown by MacGregor at the Forest Home Cemetery Greenhouses and a large group of Cinerarias by the same grower. There were also table arrangements by the North Side Floral Company and Charles Menger, Inc., and a fine shadow box with an orchid picture by Welke's House of Roses.

The F. T. D. had a large booth equipped by the Western Union office. On each side of the room were groups by Haasch the Florist, Ernst Praefke and Frank Eberfeld & sons. There were also booths by Rudolph Preuss & Sons, the Shorewood Flower Shop and Mary J. Skinner, Gaulke & Clauer, William Zimmerman, Richard Lietz & Son, Alma E. Balfanz, Estelle Gumz, Baumgarten's, Gustav Holtz, Eugene Oestreicher, Hugo Locker & Sons, Charles Menger, August F. Kellner, and Kroseberg Florists.

In the center of the hall three plant groups were shown—Kennedy & Kennedy with an oval bed of foliage and blooming plants, The Holton & Hunkel Co. with a similar bed, and Norman Schmidt with a bed of Primula obconica. An attractive woodland setting was a birch forest by August F. Kellner Co. with many forced wild flowers, primroses and bulbous flowers.

Mrs. A. O. Trostel exhibited some wonderful hybrid orchids from her private conservatory.

THE Charles Menger Company featured a Holland wedding arrangement with the bride in Holland costume—wooden shoes and all with appropriate flowers of bulbous stock in the approach to the alter.

Another wedding group was shown by Gustav Holtz Co. representing the latest in wedding decorations with a bride's bouquet of valley and other appropriate flowers.

The kiddy's Easter picnic was featured by Betty Kroseberg and Henrietta Bischoff. It included a sand pile flanked with flowering trees and many playthings. Hugo Locker & Sons had a wonderful old fashioned garden of flowers artistically arranged. Baumgarten's had a very rich booth with silk backgrounds and fine make-up pieces.

Many growers and retailers exhibited bouquets and small pieces which were scattered throughout the hall, sufficient booth space not being available. In this class were Gustav A. Pohl, Frank Zacharias & Son, Born's Flower Shop, Edward Petzold, A. Reinhardt & Son, Frank Eberfeld & Sons, Dettmann's Flowers, Fox Point Floral Co., Mueller Flower Shop, South Milwaukee Rose Gardens, Thomas Griebler & Sons, Lester C. Eiffler, Greggerson & Kellner and John Rosso.

STRAWBERRY ACREAGE LOOKS GOOD

STRAWBERRY acreage in early and late shipping states where there is only limited competition does not appear to be excessive and market prospects in these states are fairly good. In the second early states, especially in the Ozarks, there is however, still an excess in acreage and production. A 20% reduction in the crop is being recommended in these states.

Last year the yield in the late producing states, including Wisconsin, was light, there being nine million quarts less than in 1927. Prices were good but there appears no reason for increase in acreage in the late states.

Mrs. Vanderspoof–Gilden–Vanderspoof had just purchased a two-cent stamp from the post-office clerk.

"Must I stick it on myself?" she asked haughtily.

"Absolutely not!" replied the clerk. "You will have to put it on the letter."

TABLE OF CONTENTS

	Page
Early Spring Flowers	227
Why Breed New Varieties	230
Varieties and Culture of Iris	232
Lessons For Potato Growers	233
Some New Hardy Perennials	234
How Much Fertilizer for the Orchard?	235
Outlook for Potatoes	235
Apple Scab Control	236
Using Paraffin for Grafting	238
Value of Honey Bees	238
Tariff on Bananas	239
Coming Events	240
Ribbons for Shows	240
Cover Raspberries	240
Spray Your Raspberries	241
Spraying Trees at Night	241
About the Home and Garden	242
Annuals—When and How to Plant	242
Garden Book Notes	242
Cranberry Growers Meeting	244
Wisconsin Cranberries	244
Home of the Cardinal	245
Garden Club Federation News	246
Standards for Flower Shows	246
Garden Club Movement	247
Milwaukee Flower Show	252
Strawberry Acreage	252

INDEX TO ADVERTISERS

	Page
Albright's Nursery	255
American Farm Machine Co.	235
American Forestry Co.	226–254
Baker Nursery	226
Barrett Company	249
Beaver, Jeff & Sons	254
Beier, Chas. J.	226
Blackman, H. B.	254
Bolens Tractor	243
Chequamegon Gardens	254
Christensen, H. C.	235–254
Cleeremans Hatchery	254
Coe, Converse & Edwards Co.	235
Columbia Gardens	226
Cream City Chemical Co.	256
Cumberland Fruit Pkg. Co.	253
Dahlberg Nursery	247
Dewalt's Gardens	247
Eschrich's Nursery	226
Evergreen Nursery Co.	253
Excelsior Nursery	226
Farmer Seed & Nursery Co.	243
Far North Gardens	255
Fitchett Dahlia Gardens	254
Floriadale Gardens	226
General Chemical Co.	251
Gifford, F. R. Co.	255
Grasselli Chemical Co.	245
Hauser, J. F.	253
Hecklinger, Fred	226
Island Fruit Farms	237
Jensen, John	254
Joelson, Mrs. Alfred	226
McKay Nursery Co.	255
Meredith, Harry F.	247
North Star Nursery Co.	243
Moser, Theron M.	226
Olds Seed Company	247
Olson, John	254
Rasmussen's Nurseries	255
Russell, A. B.	226
Sheboygan Fruit Pkg. Co.	256
Sisson's Peonies	255
Standard Engine Co.	253
Stonecrest Gardens	226
Strands Nursery	235–254
Swedberg Bros. Nursery	226
Terrell's Aquatic Farms	226–254
Toole, W. A.	256
Waterloo Floral Gardens	253
White Elm Nursery	255

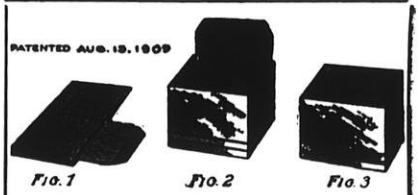


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

STANDARD GARDEN TRACTORS

Plows Seeds Cultivates Mows Hay and Lawns

A Powerful Tractor for Small Farms. Gardeners, Florists, Nurseries, fruits Growers and Poultrymen

DOES 4 MEN'S WORK

Walking and Riding Equipment. Does Belt Work.

Free Catalog.

STANDARD ENGINE COMPANY
3241 Como Ave. Minneapolis, Minn.

CHRISTMAS TREE PLANTATIONS

Get in on the ground floor for the huge Christmas tree market that is rapidly developing.

GROW CHRISTMAS TREES—THERE IS MONEY IN IT!

Write for complete information and prices on suitable stock.

EVERGREEN NURSERY

Established 1864 **Sturgeon Bay, Wis.**

WATERLOO FLORAL GARDENS
QUALITY GLADS

100 choice blooming size Gladiolus bulbs, for $2.00.
FOB cash with order for 10 each, 10 varieties.
30 No. 1 bulbs, Ex. Mixed, $1.25

WATERLOO FLORAL GARDENS
Eugene B. Porter, Prop.
Waterloo Wisconsin

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.

Copy should reach us by the 20th of the month. Send cash with order.

SHRUBS

TREE AND SHRUB SEEDS FOR sale. Many varieties. Write for price lists and planting directions and how to grow trees from seeds. Early orders will be appreciated. American Forestry Company, Pembine, Wisconsin.

NURSERY STOCK—SHRUBS

NURSERY STOCK FOR SALE. American Arbor Vitae, many sizes at reasonable prices. Send for large lists and planting directions. Order early for spring time planting. American Forestry Co., Pembine, Wisconsin.

APPLE SEEDS—Fresh and clean. Will sell while supply lasts at $1.00 per lb. American Forestry Co., Pembine, Wis.

HOLLYHOCKS

SOME EXTRA CHOICE MIXED Hollyhock plants at $6.00 per hundred. 25 for $1.50. All inspected stock. H. B. Blackman, Richland Center, Wisconsin.

LILY BULBS

REGAL LILIES. Nice blooming bulbs $2.00 per doz. Extra large size $3.25 per doz. Post paid. H. C. Christensen, 1625 Ninth St., Oshkosh, Wis.

WATER LILIES, ORNAMENTAL Water Plants, Berry-bearing shrubs and Plants for attracting birds, etc. Write Terrell's Aquatic Farm, 1006 W. Blk., Oshkosh, Wis.

STRAWBERRY PLANTS

25 MASTODON STRAWBERRIES OR Latham Raspberries. Postpaid $1.00. 4 Evergreens, Trees, Shrubs or Vines $1.00. Landscape suggestions and catalog on request. Strand's Nursery, Box 23, Taylors Falls, Minn.

STRAWBERRY PLANTS FOR SALE—Dr. Burrill, Dunlap, Warfield and Reynold's Special. $4.50 per 1,000; .55 per 100. Beavers, $8.00 per 1,000; $1.00 per 100. All plants government inspected and raised on new land. Order now. John Jensen, Warrens, Wis. Phone: Tomah AA740.

OUR CHICKS PAY

LEEREMAN'S
Quality Accredited
HICKS
Are Money Makers. Place your order with us and decide for yourself.
CLEEREMAN'S HATCHERY
Green Bay, Wis. R2J
Life Member W. S. H. S.

STRAWBERRY PLANTS — PREMIER, Beaver, Champion, Everbearing. Jeff Beaver & Sons, Eau Claire, Wis.

PREMIER AND MINNEHAHA STRAWberry plants at $5.00 per thousand, 75¢ per hundred. H. B. Blackman, Richland Center, Wisconsin.

STRAWBERRY PLANTS for sale. Dunlap and Warfield $4.00 per 1,000; 50¢ per 100. Premier $5.00 per 1,000; 65¢ per 100. Beavers $7.00 per 1,000; 75¢ per 100. All plants Government Inspected and packed in moss insuring safe delivery. Order early. John J. Olson, Box 115, Warrens, Wis.

FOR SALE—NIAGARA DUSTER—Model U 25 on skids equipped for orchard work; practically new, $75.00. F. B. Sherman, Edgerton, Wis.

PANSY PLANTS IN BLOOM, 50 CENTS per dozen postpaid. Sunset Farm, Eau Claire, Wis.

Try Our Special Selected Sweet Scented Hybrid Lupines

One Dozen $3.90 post paid

We specialize in Perennials

Send for our new illustrated Catalog

Chequamegon Flower Gardens

V. E. Brubaker, Prop.

Washburn, Wis.

We aim to grow

Good Dahlias

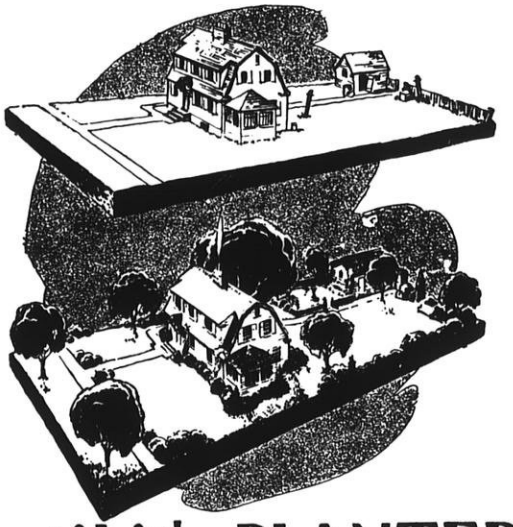
Bulbs that will produce in your garden blooms as good as—or better than—you saw in our garden or at our various exhibits last fall. Catalogue on request. Early orders accompanied by cash receive a special premium.

Fitchett Dahlia Gardens

735 E. Milton Avenue

JANESVILLE, WISCONSIN

It's not a Home-



until it's PLANTED

Before you buy write for our booklet suggestions on beautifying your home grounds!

McKAY NURSERY COMPANY

Offices: Madison, Wis.
Nurseries: Waterloo, Wis.

WISCONSIN'S GREATEST NURSERY

SPRAY MATERIALS

Lime sulphur solution
Lead arsenate
Dendrol

PRUNING TOOLS

Saws Shears
Pole Pruners

FERTILIZER AND LIME SPREADERS

Nitrate of Soda
Sulphate of Ammonia
Mixed Fertilizers
Geyer End Gate Spreaders

F. R. GIFFORD CO.
2201 University Ave. Madison, Wis.

White Elm Nursery Co.
Hartland, Wisconsin

General Line of
Ornamentals and Fruits

Special Offer

Oshkosh Strawberry

We are offering this remarkable strawberry for the third season and have an extra fine lot of plants for Spring planting.

Special price $5.00 for 200 plants (Last year Oshkosh sold at $5.00 per 100)

Write for catalog of Fruit and Shade Trees, Ornamental Shrubs, Roses, Perennials, Vines, Small Fruit Plants, etc.

We specialize in better Delphiniums

RASMUSSEN'S
Fruit Farm and Nurseries
Oshkosh, Wisconsin

W. A. Sisson W. A. Lawson

Sisson's Peonies
Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

Berry Boxes and Crates

Either made up or in the K. D., American Quart Berry Baskets, Climax Grape and Peach Basket, Till or Repacking Baskets, Plant Boxes and Veneer Tree Protectors.

Circular and Price List mailed upon request.

Write for special prices on carload lots.

Liberal discounts on early order.

Sheboygan Fruit Box Company
Sheboygan, Wis.

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which described as well as dozens of Hardy Perendainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

Spray Materials

Highest Quality at the Right Price

Lime Sulphur
(Liquid and Dry)
Arsenate of Lead
Calcium Arsenate
Bordeaux Mixture
(Paste and Dry)
Arsenate of Zinc

Potato Special
Black Leaf 40
Cabbage Special
(Maggot Killer)
Corrosive Sublimate
Weed Killer
Nicotine Dust
High grade Lime

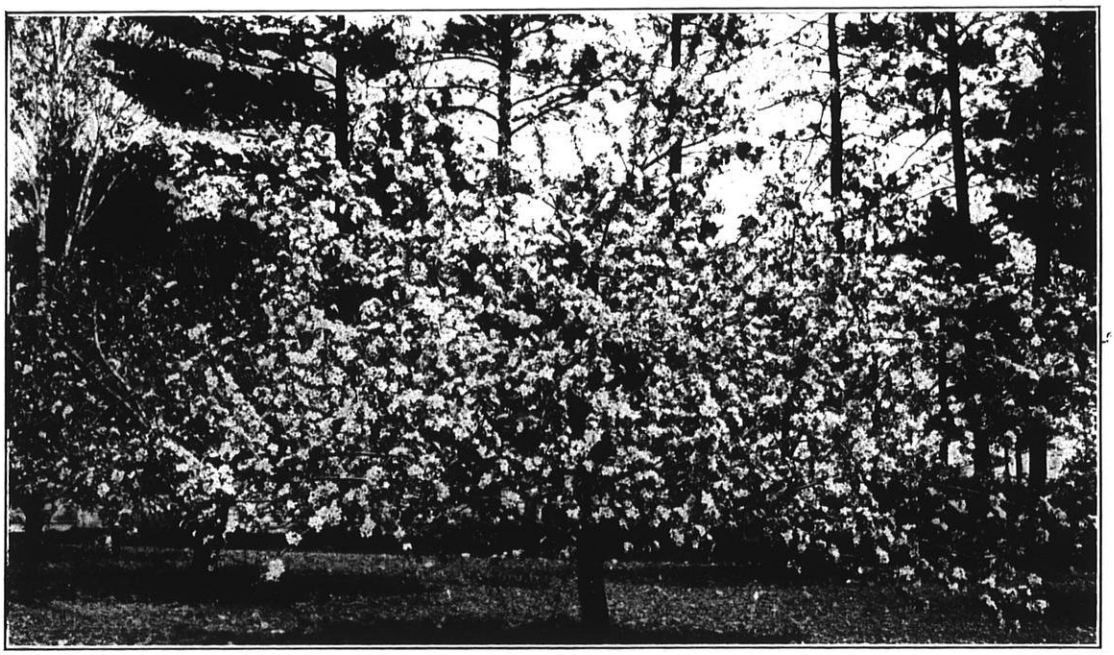
Write for Prices Now

Cream City Chemical Works

766–774 Kinnickinnic Ave., Milwaukee, Wis.
Phone Hanover 1117

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE



COMING EVENTS

The State Garden and Flower Show, Loraine Hotel, Madison, June 7-8-9

Door County Cherry Festival, May 23-26

Wisconsin Strawberry Day, Warrens, June 15

Fruit Growers Convention, Sturgeon Bay, July

Vol. XIX MAY, 1929 No. 9

Latham Raspberry Plants
State Inspected
$2.50 per 100 $20.00 per 1,000
Free from mosaic and other diseases

Strawberry Plants
Senator Dunlap; Premier
100 ..... $ .75
1,000 ..... $ 5.00
Progressive
100 ..... $ 1.25
1,000 ..... $10.00
Mastodon
100 ..... $ 2.00
Order Early
FRED HECKLINGER
Route 7 Menomonie, Wis.
Phone 520-W

BARGAINS

100 finest Gladiolus Bulbs $2.00 F. O. B. or $2.25 postpaid, 10 varieties 10 each. Spring delivery.

30 popular Iris roots, 5 each 6 kinds for $2.25. Postpaid April—July—August delivery.

6 Peony roots, 2 red, 2 white, 2 pink for $3.00 postpaid. Sept.—Oct. delivery.

STONECREST GARDENS
Eau Claire, Wis.
Send for catalog. It's free.

GLADIOLUS BULBS ASSORTED
Per 100
Large size $2.00
Medium size 1.00
Small size ..... .50
Bulblets, per quart 1.50
THERON M. MOSER
Richland Center, Wis.

STRAWBERRY PLANTS

	Per 100	1000
Premier	$ .80	$6.50
Minnehaha	.80	6.50
Minn. 999	.80	6.50
Sen Dunlap	.75	6.00
Warfield	.75	6.00

Cash with order, please
State Inspected—Free From Disease
MRS. ALFRED JOELSON
R 1 Chetek, Wis.

BEAVER
STRAWBERRY PLANTS
500 plants $5.00
1000 plants $8.00
State Inspected
Cash With Order Please
MRS. EARL JACKSON
Warrens, Wis.

GLADIOLUS

1 dozen Gladiolus bulbs, all large, 12 different varieties, packed separately and labeled, one dollar, postpaid for February and March.

A Few Specials In Large Sized Bulbs
Per bulb
Avalon ..... 15¢
Tiplady ..... 10¢
Lacinatus ..... 25¢
Peach Rose ..... 25¢
Baron J. Hulot ..... 10¢
FLORIADALE GARDENS
Wm. R. Leonard, Prop.
Route 1 Ft. Atkinson, Wis.

NURSERY STOCK
Ornamental Shrubs
Perennials Annual Plants
Evergreens Shade Trees
FRUIT TREES
Berry Plants
We specialize in landscaping and tree surgery
SCHMIDT NURSERY & LANDSCAPE SERVICE
Madison, Wis.
Fish Hatchery Road
Tel. Oakwood 42R4

TREES
SHRUBBERY EVERGREENS
and
HARDY PERENNIALS

Plant this spring and enjoy beautiful grounds this summer.

We grow a large assortment.

A Postal request will bring our catalog.

Eschrich's Nursery
STA. F Milwaukee, Wis.

BOLENS
GARDEN TRACTOR

Does Garden Plowing, Harrowing, Seeding, Cultivating, Spraying and Lawn Mowing.—Also mows hay, weeds and other tall growth. Attachments instantly interchangeable. New improved Tools, Arched Axle, Tool Control, Power Turn, Snappy Powerful Motor, Pulley for Belt Work, and many other features. Has solved the problem of thousands of gardeners, florists, poultrymen, nurserymen and suburban farmers. Time Payment Plan. Write GILSON MFG. CO., Park St., Port Washington, Wis.

Dahlias—Gladiolus—Perennials
4 good Dahlias (named, labeled) ..... $.75
100 Gladiolus (1 inch, assorted) 1.00
1 doz. perennials (assorted, labeled) 1.25
Or, entire list above, postpaid for 2.25
May we send you our price list?
DEWALT'S FLAMBEAU RIVER GARDENS
Ladysmith, Wisconsin

PANSY PLANTS
Steel's Miracle Mixed Heavy young plants in bud or bloom. 50 cents per dozen, postpaid
SUNSET FARM
Eau Claire, Wis.

We specialize in Regal Lilies
Wholesale and Retail
H. C. Christensen
1625 Ninth St.
Oshkosh, Wis.

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS

President
C. J. Telfer, Green Bay

Vice-President
M. B. Goff, Sturgeon Bay

Secretary
H. J. Rahmlow, Madison

The State Garden and Flower Show

Garden Club Federation to Stage First State Show June 7-8-9

THE newly organized State Garden Club Federation will put on a real State Garden and Flower Show at the Loraine Hotel, Madison, June 7-8-9.

The management of the Loraine Hotel has made a very fine proposition to the Federation. They will give the use of their ballroom, 50 x 100 feet, two banquet rooms adjoining, mezzanine floor and lobby, for the show free of charge.

A 25c admission will be charged which will enable the Federation to spend some money for decoration, design and speakers.

Commercial Gardens

One of the features of the exhibit will be the 8 x 16 foot commercial garden on the ballroom floor.

Seven of these spaces are available on the ballroom floor for these gardens all of which are expected to be filled. Such titles as "A Rock Garden", "Wild Flower Garden", "Perennial Garden" and "A Garden Rest" will probably be used.

In addition some of our large peony and iris growers will make special exhibits.

Garden Club Projects

The feature of the show will be the garden club project. Each Garden Club in the State has been asked to appoint committees of their club members to put on one or all of these projects.

Mr. Alfred Boerner, Landscape Architect of the Milwau-

"Little Gardens" at the Chicago Flower Show. Each garden is 4x8 ft.

kee County Regional Planning Department will have charge of the decoration and design. His services come to the Federation through the courtesy of the Milwaukee County Planning Department with the help of Mr. C. B. Whitnall of the Commission and E. A. Howard, chief of the Department. Mr. Boerner is a member of the Boerner Company, Landscape Architects of Milwaukee and is well qualified to do this work.

Show Opens Friday Evening

The exhibits will be put in place on Thursday and Friday and the official opening will be at 7:30 P. M. Friday June 7th, and will close at 10:00 P. M. Sunday June 9th. People from all over Wisconsin are expected to drive down to see the show which should be an annual event if the first is a success.

A Shadow Box or Flower Picture.

INFORMATION RELATIVE TO CONSTRUCTION AND PLANS FOR GARDEN CLUB PROJECTS

The five projects will be: 1. Shadow Boxes; 2. Luncheon Tables; 3. Window Boxes; 4. Miniature Garden Models; 5. Little Gardens.

Each club is urged to appoint committees of 2 or 3 members to plan and put on as many as possible of these projects. Committees unable to be present on entry day (Friday, June 7th) should prepare the projects and send them in care of competent parties to be set up.

All exhibits must be ready for judging at 4 P. M., Friday, June 7th. It may be necessary to work on "Little Gardens' on Thursday.

Ten Flower Show tickets will be donated to clubs for each of the first four projects put on. For the "Little Garden" twenty-five tickets will be given. Clubs may sell the tickets at 25c each, using the money to help pay expenses of the projects.

Clubs may put on 2 or 3 Shadow Boxes, Luncheon Tables, or Miniature Gardens and ten additional tickets will be given for each.

Requests for tickets, space, and equipment for all projects should be sent to H. J. Rahmlow, Washington Bldg., Madison, by May 15th, in order that they can be prepared in time.

Uniform signs with name of club, title of exhibits, etc., will be furnished if information is sent in before May 20th.

PLANS FOR EACH PROJECT

1. Shadow Boxes

Size of box 30 in. high, 24 in. wide and 18 in deep. Box will be furnished, lined in black cloth, which may not be altered or covered.

A club may exhibit 2 or 3 Shadow Boxes.

Flowers, vase and accessories must be furnished by the club.

2. Luncheon Tables

Two choices of tables will be used, with separate premiums for each. Class A. Tables 6 ft. long and 30 inches wide, set for six (3 on each side). Class B. Round tables, 54 inches in diameter set for 4. These tables will not have a polished top, being hotel tables. No silver allowed. Dishes, cloth or flowers need not be the property of the exhibitors. Judging will be on the following points: 1. Originality. 2. Appropriateness. 3. Distinction. 4. Composition.

3. Window Boxes

Standard boxes, size, 8x40 inches, and 6 in. deep will be furnished, unpainted. They will be placed in a hotel window. Any accessory as curtain, may be used. Boxes may be painted or decorated.

Soil will be furnished.

The following points will be used in judging: 1. Color Harmony. 2. Originality. 3. Composition.

4. Miniature Models

Size of model 18x24 in., to represent back yard of home. May be made by joining two boards 9x24 in. Garage and rear wall of house can be used if desired.

Scale: ¼ inch equals 1 ft.

The idea of the model is to show plans for shrubbery planting, perennial borders, walks, gardens, etc., representing an ideal back yard.

Judging will be on the following point: 1. Scale. 2. Design. 3. Planting.

4. Little Gardens

Size of garden about 4x8 ft. Soil, rocks, grass and other accessories will be furnished on request. Such requests should be in by May 20th. Flowers, shrubs and special features must be provided by the exhibitor.

Space will be alloted by the chairman. Coordination of planting required between adjoining exhibitors.

Suggested gardens are: 1. Rock Garden; 2. Flowered walk; 3. Garden Retreat; 4. Garden Pool; 5. Secluded Nook; 6. Bird Corner; 7. Practical Garden; 8. Along the garden walk; 9. Perennial Border; 10. Rose Garden; 11. Iris Garden; 12. Formal Garden; 13. Entrance Terrace; 14. Wild Flower Garden, etc.

While advice may be obtained from experts and professionals, the actual work of putting up the gardens must be done by club members.

AMATEUR FLOWER SHOW CLASSES

Rules

All exhibits must be staged and ready for the judges at 4:00 P. M. Friday June 7th.

Except in artistic classes all varieties should be correctly named and labeled (seedlings should be numbered). Any exhibit which includes other than the material specified in the schedule, either more or less, is subject to disqualification.

No exhibitor shall receive more than one premium in any one class. Any prize may be withheld at the discretion of the judges, WHOSE DECISION SHALL BE FINAL.

With the exception of the artistic or garden club project classes, all flowers shall have been grown by the exhibitor.

Remember—Quality and not quantity counts where amounts are not specified.

In collections of different varieties each variety must be in separate container.

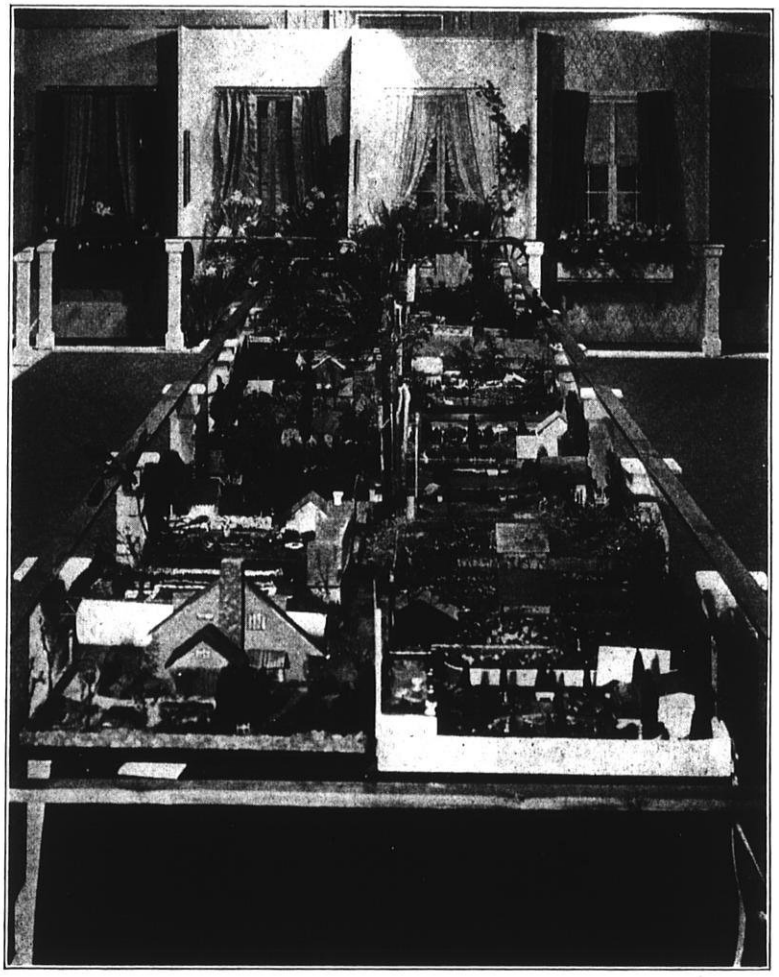
Containers will not be furnished for artistic displays.

Small containers will be furnished for all other classes.

Amateurs only may compete for Premiums. Others may exhibit.

Premiums

Premiums will be mainly plants, shrubs or bulbs donated by commercial growers. Names of donors will appear in official premium list. The amount set after each item represents the value of these premiums.



A Group of miniature gardens at the Chicago Garden and Flower Show.

CLASS A—IRIS

No. 1

Collection of Iris not bearded (including Siberica etc.) One to three stalks of each variety. $5—$3—$2.

No. 2

Collection of bulbous Iris (including Spanish, English, etc.) One to three stalks of each variety. $3—$2—$1.

No. 3

Collection of 4 different varieties of Iris (Siberica or Orientalis). Three stalks each. $3—$2—$1.

No. 4

Artistic display of not more than 25 stalks of beardless Iris with own foliage (appropriate Tile Containers) $5—$3—$2.

No. 5

Artistic display of not more than 10 stalks of beardless Iris with or without other hardy flowers and foliage. Baskets. $3—$2—$1—$1—$1.

No. 6

Artistic display of not more than 15 stalks and not more than five varieties bearded Iris with or without other flowers and foliage. Baskets. $3—$2—$1—$1—$1.

No. 7

Artistic display of not more than 10 stalks of bearded Iris with own foliage. Low dish or bowl. $3—$2—$1.

No. 8

Artistic display of 10 stalks or more of one variety bearded Iris to suggest the effect of a Garden Clump.

(Lifted plants are Barred $3—$2—$1—$1—$1.

No. 9

Specimen stalk, self colored, white, (Example, White Knight, Kashmir White, Etc.) $1—$.75—$.50.

No. 10

Specimen stalk, self colored, yellow, (Examples: Sherwin Wright, Shekinah, Etc.) Point score: $1—$.75—$.50.

No. 11

Specimen stalk, self colored, pink, (examples, Dream, Georgia etc.)—$1—$.75—$.50.

No. 12

Specimen stalks, plicata (examples: Mme. Chereau, Mme. Chobaut, etc.) $1—$.75—$.50.

No. 13

Specimen stalk, self colored, lavendar, light blue or mauve, (examples: Ballerine Corrida, Mlle. Schwartz, etc.) $1—0.75—$.50.

No. 14

Specimen stalk, Amocana type, White standards. (examples: Rhein Nexe, Mildred Presbu, etc.) $1—$.75—$.50.

No. 15

Specimen stalk, dark blue, red purple or blue purple, (examples: Souv. de Mme. Fandichau, Lent A. Williamson, etc.) $1—$.75—$.50.

No. 16

Specimen stalk, blended tones, (Examples: Afterglow, Isoline, etc.) $1—$.75—$.50.

No. 17

Specimen stalk, dark bi-color, (examples: Ambassadeur, Bruno, etc.) $1—$.75—$.50.

No. 18

Specimen stalk, reddish tones, (Examples: Leverrier, Seminole, etc.) $1—$.75—$.50.

No. 19

Specimen stalk, best stalk of Iris in the show. Silver Flower vase. $1—$.75—$.50.

No. 20

Collection of 25 distinct varieties, one stalk each. 1st Silver vase—$5—$2.

No. 21

Collection of six distinct varieties, 3 stalks each. $5—$3—$2—$1.

No. 22

Best display seedling Iris. $3—$2—$1.

No. 23

Artistic Arrangement of not more than 15 stalks of Wild Iris with foliage. To suggest a clump—stalks of buds and bloom with foliage (lifted clumps disqualified) $3—$2—$1.

No. 24

Miniature Garden Pool, using trays 16 x 24 inches. Silver vase—$5—$3.

CLASS B—PEONIES

No. 1

Vase of 10 blooms, double, one variety, named $3—$2—$1.

No. 2

Collection of six varieties, double, named, one bloom of each. $3—$2—$1.

No. 3

Vase of three blooms, white, double, named, and one variety. $2—$1—$.50.

No. 4

Vase of three blooms, light pink or pink and cream, double, named, any one variety. $2—$1—$.50.

No. 5

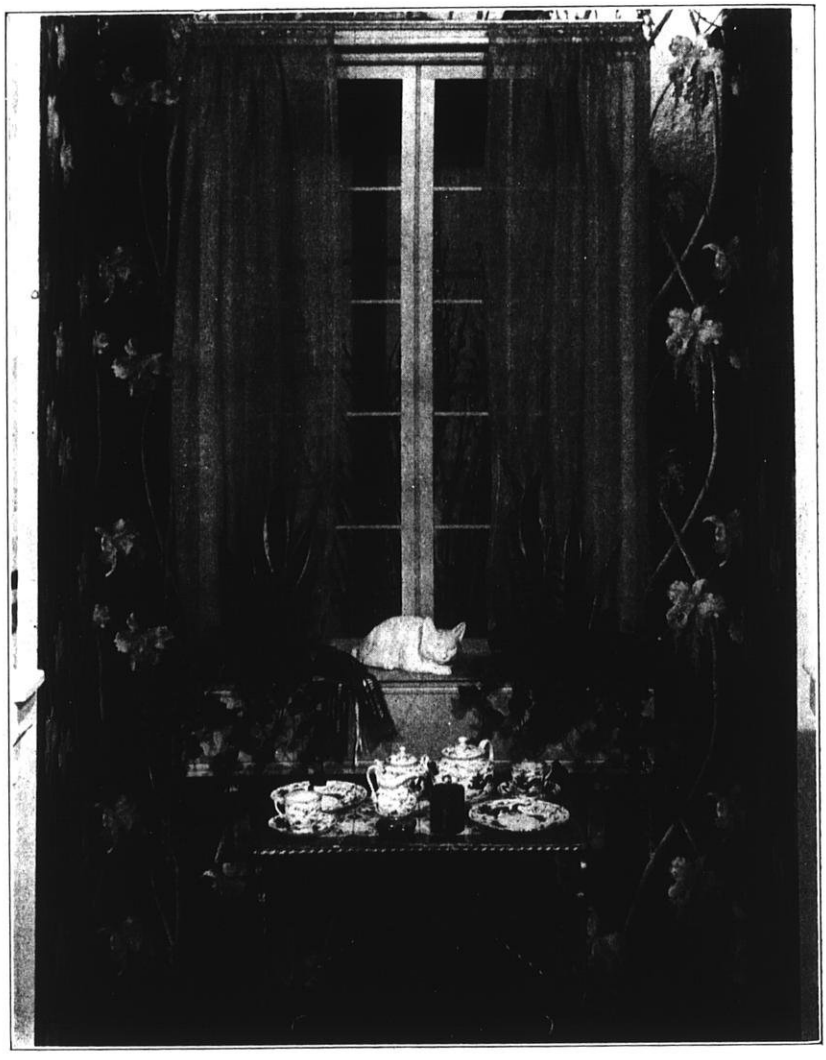
Vase of three blooms, dark pink, double. named, any one variety. $2—$1—$.50.

No. 6

Vase of three blooms, red or crimson, double. named, any one variety. $2—$1—$.50.

No. 7

Vase of three blooms, Japanese, any variety. $2—$1—$.50.



A Window Box.

No. 8

Collection of singles, not over 5 varieties, one bloom of each. $3—$2—$1.

No. 9

One specimen bloom of Tree Peonies, single or double. $3—$2—$1.

No. 10

Large basket main feature to be peonies. $5—$3—$2.

No. 11

Novelty arrangement, any container, peonies with other flowers or foliage. $5—$3—$2.

CLASS C—ROSES

No. 1

Most artistic basket, any color. $3—$2—$1.

No. 2

Most artistic bowl, any color. $3—$2—$1.

CLASS D—PERENNIALS

No. 1

Delphinium—Basket or vase, one variety. $3—$2—$1.

No. 2

Delphinium—Basket or vase of mixed varieties. $3—$2—$1.

No. 3

Columbine—Vase of long spurred mixed varieties. $2—$1—$.50.

No. 4

Columbine—Artistic bouquets of Columbine in any choice of containers with or without other foliage. $3—$2—$1.

No. 5

Lilies—Not more than 3 stalks of Madonna Lilies. $2—$1—$.50.

No. 6

Lilies—Not more than 5 stalks of Lemon Lilies. $2—$1—$.50.

No. 7

Lilies—Two stalks of any other named variety. $2—$1—$.50.

No. 8

Shasta Daisies—Most artistic basket or vase. $2—$1—$.50.

No. 9

Pyrethum—Most artistic basket or vase. $2—$1—$.50.

No. 10

Sweet William—(Dianthus Barbatus). Most artistic basket or vase. $2—$1—$.50.

No. 11

Oriental Poppies—Artistic basket or vase. $2—$1—$.50.

No. 12

Lupines—Artistic basket or vase, one or more varieties. $2—$1—$.50.

No. 13

Mixed Bouquet—Most artistic arrangement. $5—$3—$2.

No. 14

Pansies—Bowl of mixed varieties. $2—$1—$.50.

WISCONSIN GARDEN AND FLOWER SHOW

COMMITTEES

Executive Committee: Mrs. R. H. Malisch, Pres.; Mrs. C. W. Vaughn, Madison, Vice Pres.; Mrs. A. W. Sperber, Sec-Treas.; Mr. H. J. Rahmlow, Madison, Corresponding Sec.; Mrs. C. E. Strong, West Allis.

General Entry Committee: Mrs. R. H. Malisch, Chairman; Mrs. C. L. Dean, Ass't Chairman, Madison.

General Manager: H. J. Rahmlow.

Shadow Box

Miss Melissa Brown, Supt., Madison.

Luncheon Tables

Miss Dora Graham, Supt., Madison.

Miniature Gardens

Mrs. John Wilken, Supt., Madison.

Window Boxes

Mrs. Scott R. Mackay, Supt., Madison.

Little Gardens

Mrs. C. E. Strong, Supt., West Allis.
Miss Clara Larson, Madison.

Flower Show Committees

Iris—Mrs. Carl Felton, Chairman, Madison; Mrs. Wm. Gilbert, Madison.

Peonies—Mrs. F. M. Wilcox, Madison; Mrs. E. C. Schneider, Madison.

Perennials—Mr. W. H. Milward, Madison; Mrs. Frank Schoen, Madison.

Roses—Mrs. H. Stagner, Madison; Mrs. I. Sinaiko, Madison.

Finance Committee

Mrs. A. W. Sperber, Chairman, Mrs. C. W. Vaughn, Assistant Chairman.

Layout and Design

Alfred Boerner, Milwaukee County Regional Planning Department.

Entertainment

Fred Bodenstein, Madison.
Mrs. Martin Glaeser, Madison.
Miss Martha Block, Madison.

Publicity Committee

Mark Troxell, Madison, Chairman.

LARGE GARDEN EXHIBITORS

Up to May 1st the following commercial growers had expressed their intention of exhibiting in this class and also donating plant premiums. Others will no doubt be heard from soon as there has hardly been sufficient time for them to notify the Secretary.

Mr. W. A. Toole of Baraboo will stage a wild flower garden and has donated twenty-five dollars in plant premiums.

The White Elm Nursery of Hartland will build a large rock garden and has given twenty-five dollars in plant premiums.

The Swartz Nursery Company of Kenosha will build a large garden the title of which has not been given and has also donated twenty-five dollars in plant premiums.

The Rentschler Floral Company of Madison Cooperating with Manchester's wil stage "The June Bride".

The State Conservation Commission will feature an outdoor scene.

Mr. Wm. Leonard of Floriadale Gardens, Ft. Atkinson, specializing in gladiolus has donated ten dollars worth of plant premiums. The Coe, Converse and Edwards Nursery of Ft. Atkinson has also given ten dollars in premiums.

Kellogg's Nursery of Janesville is planning a garden display and will give plant premiums.

SUCCESS WITH FRENCH ENDIVE

Dear Mrs. Strong: My friend and neighbor, Mrs. Thomas S. Biggar, has the interesting habit of experimenting each year with one or two new plants. This last year she tried Witloof Chicory, or French endive, and was so successful that her own table and those of her friends were supplied with this delicious salad all winter.

The directions are simple. Start the plants from seed in April, and transplant when they are a few inches high so that they are five or six inches apart. Let them grow all summer, and in the fall before a frost dig them up carefully. Trim the tops (being careful not to cut too close to the crown), and also the roots so that they are not over eight inches long.

Then take a heavy paper carton perhaps eight or ten inches deep. Lay the roots in the box, tipped sideways, with the crowns toward you, and tip box back so as to fill with sand to the top.

A second carton eight inches deep, with the bottom removed, is set on top of the lower one and filled with dry leaves so that the chicory grows up through the leaves.

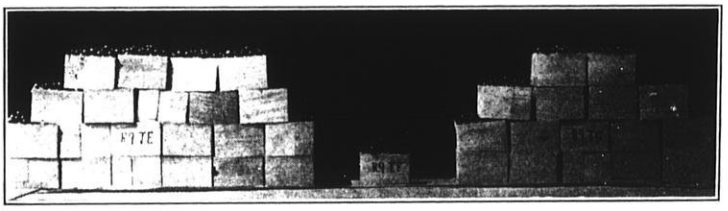
It is ready to cut in three weeks and is cut as you need it. Fresh stalks grow from the cut plant for several weeks.

MRS. ETHEL S. RAYMOND,
Edgerton, Wis.

Honey-Bees Increase Cherry Yields

H. D. HOOTMAN
Secretary Michigan State
Horticultural Society

THE possibility of using honey-bees to increase yields in sour cherry orchards is a question that only recently has had the attention of fruit growers. The Montmorency sour cherry is generally considered self-fertile; its blossoms being capable of developing into fruit when fertilized with its own pollen. The desirability of having plenty of wild insects or honey-bees in sour cherry orchards during the blossoming season has not long been appreciated. Too many fruit growers in the past have thought that pollen from fruit trees was blown about from one part of an orchard to another by the wind. This is not the case.



The crop from the screened tree (on next page) compared with the crop of insect pollinated trees standing on either side of it.

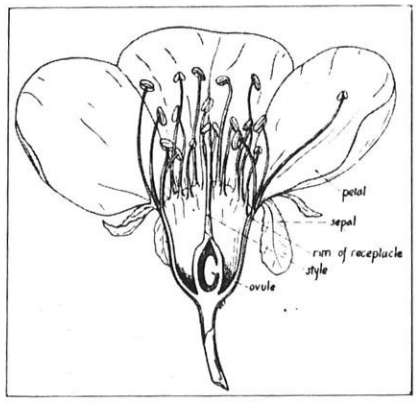
Insects Excluded

In the spring of 1927 a wire screen cage was built around a Montmorency cherry tree in the Michigan State College orchard at East Lansing, to exclude all insects during the blossoming season. A severe freeze during April injured many of the cherry buds so that their development into fruit was impossible.

One warm sunny day during blossoming a man entered the cage and with a small brush pollinated the live blossoms on a single large limb—doing the work of the bee—distributing the pollen from the stamens to the sticky stigma. 49% of the live blossoms on the hand pollinated limb set fruit, while the balance of the blossoms on the tree subject only to wind pollinations, set 4% of their live blossoms.

This data along with field observations indicated that sour cherry yields in some orchards might be measurably increased by assuring plenty of insect activity in the orchard at blossom time.

A thorough test of this pollination idea with sour cherries was made in 1928. Colonies of bees were distributed in many sour cherry orchards to utilize for pollination purposes any flights that were made. In four widely separated orchards single trees were "caged" excluding insects to demonstrate the folly of depending upon wind pollination. The result of all these tests demonstrated the desirability of adequate insect pollination. In orchards where colonies of bees were used for the first time the owners invariably underestimated the size of their crops.

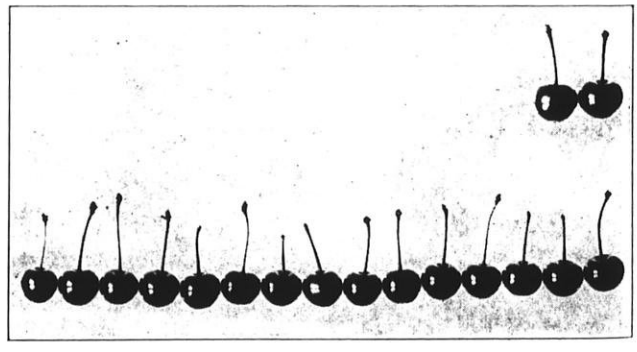


(Above) Sour cherry (Prunus Cerasus) showing the parts of the flower. Although the stamens and pistil are in close promimity, only occasionally is pollen distributed from the stamens to the stigma by the wind.

Colonies Distributed in Cherry Orchards

Friday Brothers located near Coloma, Michigan, encouraged by their satisfactory experience with bees in a Hale peach orchard in 1927 decided to use bees in all their orchards in 1928. The trees in their cherry orchards are of mature size. The largest crop produced previous to the season of 1928 was 120 tons. The 1928 crop totaled 188 tons. In commenting upon the increased yield Mr. Friday stated, that while a part of the increased tonnage was probably due to the increased size of the trees, he credited 50 of the additional tons to the bees.

In the W. R. Roach Company orchards located north of Hart, Michigan, 200 colonies of bees were distributed in 150 acres of

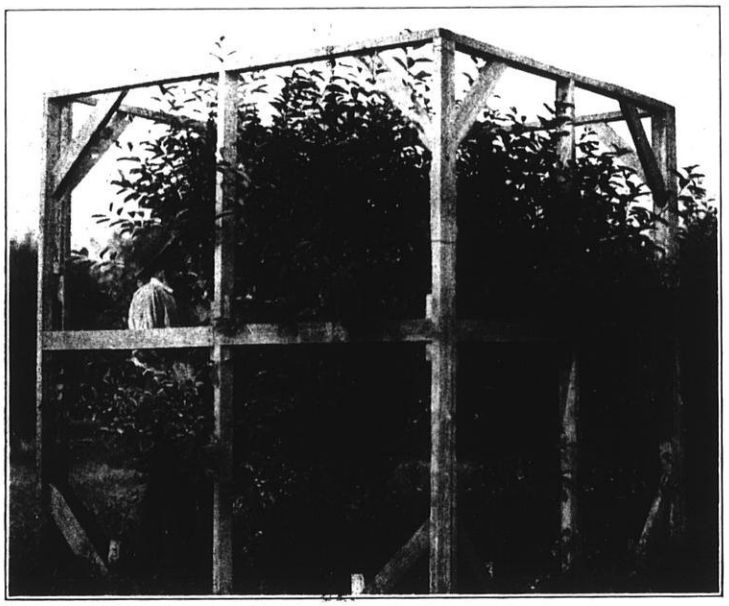


A comparison of the percentage of "set" in 1928 between 100 insect pollinated and 100 wind pollinated cherry blossoms.

apple and cherry orchards. Where the trees were very large as many as three colonies were distributed on a single acre. In blocks where the trees were seven or eight years of age only one colony to three or four acres of orchard were used. The colonies remained in the orchard eleven days. Weather conditions during this period were not any too favorable for bees to work, but in this limited time three tons of honey were gathered. Further, the cherry crop from these orchards totaled 265 tons. The yield from the McIntosh block of 20 acres exceeded all early estimates. This orchard had been notorious for its light crops; the largest crop of previous years totaled 1600 bushels. The 4000 bushel crop of 1928 was made possible by the judicious use of bees and bouquets.

It has long been known that flowers secrete nectar for the sake of attracting insects, but it is doubtful if the real value of the sour cherry as a honey plant has been appreciated by bee keepers. Sour cherries are generally not sprayed until after blossoming. This makes it possible for bee keepers to rent their colonies in concentrated cherry sections, gather the nectar flow available and at the close of the blossoming period move their colonies to other honey producing sections—thus eliminating the hazard of arsenical poisoning to the bees.

At a baseball game a young woman asked her escort: "Why does that man behind the hitter wear such a big bib?" He explained to her that it was to keep the catcher's shirt from getting all mussed up when the ball knocked his teeth out.



A sour cherry tree at the Graham Horticulture Experiment Station near Grand Rapids that was screened during the blossoming season to exclude insects.

NORTH DAKOTA NOTES

SEC. A. F. YEAGER

A member asks how to kill fish worms in soil. In flower pots it may be done by watering with lime water. In the open ground apply corrosive sublimate solution made by dissolving three ounces in a fifty gallon barrel of water. Apply this to 1000 sq. ft. of grass, then wash in by applying twice as much clear water. Do not use metal containers.

A member asks how to kill poison ivy in a camp ground. Since this likely means that the ivy is growing under trees which may not be injured, we suggest using tar paper or mulch paper, thoroughly covering the ground with it for one year.

In the Market Growers Journal of March 1 there is quite a complete write-up on the use of paper mulch. Prof. Thompson's conclusion is that paper may be expected to increase the yield and hasten maturity of many vegetable crops, sometimes improving quality also. He said commercial growers would be justified in using it only as an experiment and interested growers would do well to try it. Because of the high cost of paper it should not be expected to return a profit with crops having a low value per acre.

In the report of the Horticulturist from the Dominion of Canada for 1927, we note the suggestion that tipping a barrel over a hill of rhubarb in the spring, thus causing it to grow in the dark, will produce much higher quality rhubarb for early spring use.

The same report states that in 1927 paper mulch greatly stimulated the growth of tomatoes at Ottawa.

In cutting out apple blight, Mr. Carpenter says he sears the cut surface with a soldering iron instead of using antiseptics.

Alex Laurie, in the "American Florist" suggests soaking hard Glad cormlets in commercial strength sulfuric acid for ten minutes, then washing and planting. In many cases twice as good a germination was secured as where the cormlets were planted without treatment.

Why Breed New Varieties

W. H. ALDERMAN
Chief Division of Horticulture
University of Minnesota

(Continued from April issue)

In the April issue Prof. Alderman told of the types of fruits and vegetables grown a few generations ago and the great improvement that has been made during the past generation. In this article he tells of the new introductions and their value to this region.

OVER in Minnesota we feel that the Latham raspberry is rather a remarkable variety and we of the Experiment Station are proud of the fact that it is a product of our plant breeding operations, but we have to acknowledge that, good as it is, it might still be improved in quality. Hardy though it may be, we need still hardier varieties. In common with most of our commercial varieties of raspberries, it is subject to mosaic and most of the other raspberry diseases. There is a golden opportunity to breed disease-resistance or disease-immunity into many of our common fruits.

I am certain that it is possible to produce varieties of raspberries that will be practically immune to such a disease as mildew, which is at present appearing to a serious extent in Minnesota, and that resistance to mosiac, or perhaps to the aphis which transmits mosiac, may be developed to such a point that it will constitute almost practical immunity.

America needs a pear of the quality of the Bartlett that is immune to blight and more resistent to cold. Wisconsin and Minnesota would like to grow peaches, at least for home use, if not for commercial purposes. These two states are peopled extensively by northern and western European races. What wouldn't these people give for a gooseberry of the size and quality of the familiar Old World fruit which could be grown successfully and easily under our conditions?

We might spend more time upon a recital of the things which are needed by the fruit grower, but after all it would be largely a repetition. The vegetable grower has an equally long list, perhaps a longer one, for his list of varieties is more extensive. I need only to refer to a few of the problems in the vegetable field to call your attention to the importance of breeding in this group of plants.

Our Minnesota growers pointed out the need of a carrot of the coreless type that would be as large and vigorous and productive as the Chantenay. They show the need in Minnesota of an early tomato of a better type than any at present grown and one which should be particularly firm and meaty and a good shipper. We have good cantaloupe land along the Mississippi and around the Twin Cities, but it was pointed out that cantaloupe varieties were unstable and that none are well adapted to our Minnesota growing conditions.

Consider, if you will, where vegetable varieties have been produced and where vegetable seed is being grown. They have been produced in regions where the climatic conditions are very different from those of the upper Mississippi Valley. The seeds for the most part, are grown under conditions very different from our own. The same variety of lettuce that is grown so successfully in the Imperial Valley of southern California, 300 feet below sea level, is being produced by the growers of the Duluth district on raw peat land in which frost sometimes clings eight inches below the surface until after the middle of June. Can you wonder that these lettuce growers are asking that something be done to develop a strain of lettuce which is a little better adapted to their conditions than the one which is now available.

The potato growing industry of Minnesota and Wisconsin is developed on an enormous scale. Most potato growers are quick to point out the defects of most of our standard varieties.

If you growers of ornamental plants were asked to express your needs in this line, think what a long list of wants would be forthcoming. Our planting list of ornamentals, large as it is, still falls far short of that available to the people of other regions. What an opportunity to produce hardy lilies of the Regal or Elegans type! What a chance to produce hardy chrysanthemums that will be a little more certain to come into flowering in the early autumn of our Minnesota and Wisconsin seasons! What a chance to improve various varieties and kinds of shrubs and vines, to increase their resistance to winter cold, to extend the color range of the blooms, to raise or lower the stature of the plants, to develop better foliage, more ornamental plant forms. The possibilities of Rosa Rugosa bybrids have barely been touched. But enough has already been said to call attention to the countless opportunities and needs for plant breeding with all types of horticultural crops.

Organized plant breeding in fruit crops, in connection with the experimental station, has been under way in Minnesota for twenty-one years. You may be interested in what it has been possible to accomplish in such a period of time, which is short indeed, when we realize the slowness with which fruit plants develop into maturity.

In the twenty-one years which have elapsed since the University of Minnesota Fruit Breeding Farm has been established, the state has expended approximately $200,000 for the support of the institution. This, you say, is a good deal of money. Has it, as an investment, been worth while for the state of Minnesota? During this period some 32 or 33 new varieties have been produced and introduced to the trade. Some of these have been eminently successful, some of them give evidence of falling by the wayside, but on the whole successes have been far more conspicuous than the failures.

You might be interested to know that the Latham raspberry, which was sent out in a small way for trial fourteen years ago, is now the leading variety of Minnesota. You might be interested too, to know that during the past season about 4,500,000 mosaic-free raspberry plants of this variety have been dug and sold by Minnesota growers. The price secured for these plants was approximately $100,000. During this same year, as nearly as we can estimate without having actual figures available, between three and four hundred thousand dollars worth of fruit of the Latham raspberry was harvested in the state of Minnesota. In other words, this one variety of fruit has brought an income to Minnesota growers in one season of between four hundred and five hundred thousand dollars, more than double the total cost of the University of Minnesota Fruit Breeding Farm from the time of its establishment up until the present day. We may take a just pride in the record of this production.

You might be interested to know that next spring plants of a new variety of raspberry, Minnesota No. 223, will be sent out for trial as a variety that gives promise of equalling the producing powers of Latham, that promises to grow farther north because of its greater hardiness and that will make an excellent running mate for the Latham variety in the regions where the Latham is now grown extensively because the new variety is a week earlier in season. This new sort is as yet untried except on the grounds of our own station and on a very few trial stations where plants have been disseminated. There is an added interest to this variety because it is resistant, if not immune, to mildew and because there is some probability of its proving more resistant to mosaic than its parent, the Latham.

During the twenty years a dozen or fifteen new varieties of hybrid plums have been introduced. These have completely displaced the older varieties of native plums that have been so long popular in the state of Minnesota. A new commercial enterprise is being developed within our state, modest in size as yet, but seemingly of considerable promise, namely, the growing of these hybrid plums to supply the Twin City and other local markets within the state. This is the first year that any considerable amount of this new fruit has come upon the market and most of the growers are rather enthusiastic over it. One well known horticulturist was heard to make the statement that he would not hesitate to plant eighty acres of plums if he had the land and the time to devote to that crop.

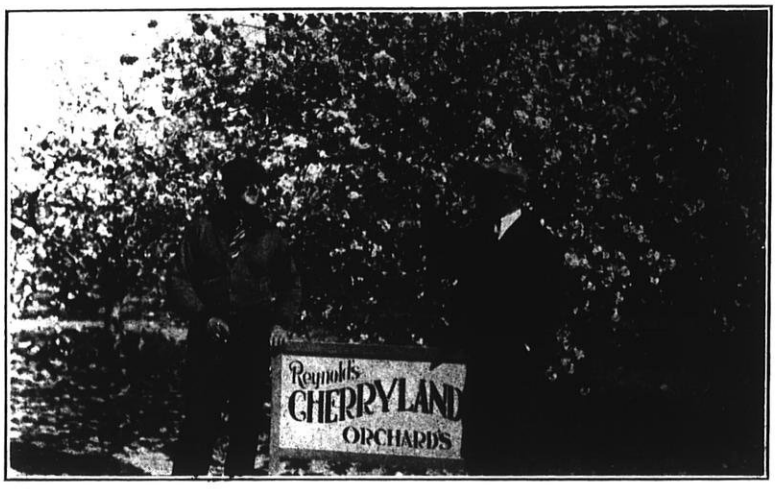
The Haralson apple has been meeting with a kindly reception and thousands of trees of it have been planted in various parts of Minnesota. It has yet to prove itself under the acid test of commercial and home orchard conditions. It is not a high quality apple when compared to the Delicious, McIntosh and others of rich aroma and flavor, but it *is* sprightly, juicy and crisp. It *will* keep throughout the winter; it *is* hardy enough so that it may be grown in most places in Minnesota and there does seem to be a place, temporarily at any rate, for a fruit of that type in our state.

It is very difficult to place any value on these new fruits, as we have already done for the Latham raspberry, but it is very clear that, from the dollars and cents standpoints alone, it *has* been a very profitable investment for the state of Minnesota to conduct an extensive fruit breeding program.

I do not believe that one can measure the value of such an enterprise in mere money returns. The people who live on the lands of the north look forward to better living conditions, to better home surroundings, to a more satisfying home life. It has been aptly said that farming is more than a business, it is a mode of living. If we can conceive of the prairie homes of twenty-five years ago and compare them with the possible prairie homes of today, we will see that, through the activities of the Minnesota State Fruit Breeding Station and similar stations in adjoining states, it is now possible for these farmers to produce for their own home use a fair supply of excellent fruits which will be available throughout the twelve months of the year. When we realize that this would not have been possible without the aid of plant breeding we will, I believe, agree that there is a value to this fruit breeding work that has no connection with commercialized industry, that is not measured in dollars and cents, but which contributes to the happiness and the well being and the satisfaction of the northern farmer. The effect of all this in holding families upon the farm, in stabilizing the agriculture of the Northwest and in making the life of the prairie farmer and his family happier and more satisfactory,—in its contribution to these things fruit breeding has rendered its greatest and most valuable service in the region of the Upper Mississippi Valley.

The Door County Cherry Festival

CARL REYNOLDS
Sturgeon Bay



The Reynolds Bros. in their orchard during the 1928 blooming season.

DOOR County is planning a wonderful "Cherry Festival" on May 23rd to May 26th. The program will include:

Parade of Floats and School Children.
Crowning of Cherry Blossom Queen.
Pageant.
Reception of Governor Kohler.
Blossom Ball.
Trips by auto through the most concentrated cherry sections.
Aviation activities and sight seeing trips at the Cherryland Airport.

Thirty thousand people are expected to attend the event. Our members are urged to make the trip if at all possible. The cherry orchards in full bloom are a wonderful sight.

Mr. Carl Reynolds, Secretary of the Door County Chamber of Commerce, writes as follows:

"We will have a Cherry Blossom Queen who will tour the eastern section of Wisconsin about a week in advance of the Festival. She will be accompanied by her court which will be made up of other girls who have taken part in the contest. We will broadcast information regarding our Cherry Festival from the radio stations in Milwaukee, DePere and Stevens Point. We will have full page displays in some Milwaukee and Chicago papers and as a result we expect to draw about 30,000 people during that period. We will attempt to have the bridge free for the period and will do our best to provide all visitors with a taste of free cherry pie.

Special trains will be run up from Milwaukee at reduced rates, and we are making arrangements to accommodate our visitors with good meals and sleeping accommodations. We urge that inquiries be addressed to the Door County Chamber of Commerce at Sturgeon Bay, Wis., and we will be glad to send complete information promptly, as well as make reservations if they are desired. Remember that all Door County will be hosts to our visitors at this time, and they will determine to make their visit a most enjoyable one."

As You Like Them

Recently the proprietor of a country hotel served a fine plate of strawberries to a patron.

Patron: "What beautiful berries! Where did you get them?"

Proprietor: "I raised them."

Patron: "Do you put fertilizer on them?"

Proprietor: "You can put anything you want to on them, but we generally put cream and sugar on."

A Milwaukee landlord got the following phone call the other day: "Send me 50,000 cockroaches this morning please."

"What the Sam Hill!" exclaimed the landlord "do you want with 50,000 cockroaches?"

"Well—" drawled the voice, "I am moving out of your apartment today and your lease states that I must leave the premises in exactly the same condition in which I found them."

Long rows of cherry trees in full bloom are a wonderful sight. M. B. Goff in his orchard.

Some Experiences in the Use of Tree Wound Dressings

T. J. MANEY
Iowa State College
Ames, Iowa

IN reviewing the literature on tree wound paints, one frequently meets with the caution that care must be exercised to prevent the paint or dressings from covering the edge of the bark, as it is likely to produce injury or retard the healing process.

Some years ago the writer in carrying out blister canker treatments used a certain roofing paint as a wound dressing and found that this particular paint caused no injury. This experience suggested the work which is reported in this paper.

In June 1927 a number of 14-year-old high-headed bodygrafted seedling apple trees on Virginia crab stock were selected and treated as follows with each of the wound paints used:

One tree—Paint applied over bark on trunk from ground line to crotch.

Two trees—Oval section of bark 3″ x 12″ removed from south side of trunk and wound painted immediately.

Two trees—Oval section of bark removed as above. Wound allowed to dry 48 hours and then painted.

One tree—Check. Oval section of bark 3″ x 12″ removed and wound left uncovered.

In addition, lots of five trees each of 3-year-old Northwestern Greening were body painted respectively with representative paints. In June 1928 the wound treatments were repeated on additional trees. Two trees were wounded by removing a 3″ x 12″ oval section of the bark and painted immediately, and two were treated similarly and painted after 48 hours. At the time wound treatments were made the bark was slipping freely so that the sections could be removed without apparent injury to the underlying cambial tissue.

The effects of the various wound dressings are best summarized by presenting the following table.

TREE WOUND PAINTS

Wound Paint	5 3-year-old tree treatments			
	Cambium Injured	Cambium Uninjured	No. Injured	No. Uninjured
Inter State Chem Co. Tree Wound Paint	X			
Franklin Paint Co. Tar Base	X		5	
Franklin Paint Co. Asphalt Base		X		5
Thompson Hayward Chem. Co. Creosote		X		
Sherwin-Williams Co. Pruning Compound		X		5
Barrett Co. Elastigum, Roofing paint		X		5
Std. Oil Co., Calif. Calol. Asphalt Base	X			
Std. Oil Co., Calif. Oronite Roofing Paint		X		5
White Lead and Raw Linseed Oil		X	5	
Furfurol No. 1	X			5
Furfurol No. 2	X		2	3
Homans-Gibson Co. No. 43 for the tree (liquid)	X		5	
Homans-Gibson Co. No. 43 for the tree (paste)	X			
Davey Tree Surgery Co. Daveyite	X		1	5
Pine Tar	X			
Pittsburgh Plate Glass Co. Pruning Compound		X		

In a consideration of the data given in the foregoing table the check lots were taken as a basis for making comparisons. In these treatments the oval sections of bark were removed and the exposed cambial areas left untreated, with the result that the cambium showed no apparent injury. The surface hardened and by the end of the season had formed a covering of smooth, hard bark. The treatments indicated as "Cambium uninjured" healed quite generally in this manner, while on those marked "Cambium injured" the cambial surface was completely killed within the outlined oval.

The most significant fact brought out in the whole study was that none of the preparations caused injury or retarded the growth on the edges of the wounds. No particular care was taken while painting to keep the paint from covering the edges. It is also interesting to note that no apparent injury resulted where the trunks of the older trees were painted with the respective paints.

With the younger Northwestern Greening trees certain paints caused severe injury. Under the column headed "Injured" the Franklin tar base paint killed the trees. White lead and raw linseed oil produced severe canker injury in which the bark was killed in small patches. No. 43 for the tree liquid paint also produced similar cankers. From our previous information concerning various paints, it is surprising that so little injury occurred on young trees in full growth.

It is not proposed to make any definite recommendations based on the data given. However, it can readily be seen that

various paints are not as toxic to growing tissue as formerly supposed. It is probable that any of the paints which did not injure the tissue may be used safely in painting pruning wounds, bark injuries, and various types of canker treatments.

There is considerable interest in the use of various preparations as repellents against tree borers. but from the information at hand no definite recommendations can be given. It is recognized that seasonal variation, such as extreme heat or cold, might produce conditions under which injury from trunk painting might be serious.

POTATO GROWERS TO ORGANIZE

AT a meeting held at the State Capitol on April 16th plans were made to form a state organization to affiliate with the National Potato Institute.

The date for the meeting was set at Tuesday May 14th at 10:00 A. M. It will be held at Stevens Point. The purpose of the institute is to study the problems of the potato industry, both in the production and marketing lines and to foster such legislation as may seem necessary for the benefit of the industry.

Committees

The following committees were appointed to organize the meeting:

Arrangement Committee — James Vint, Chairman, Guy Burnham, J. G. Milward.

Publicity Committee—E. R. McIntyre, Chairman, A. W. Pommerening, A. W. Hopkins.

Resolution Committee—A. J. Larson, Chairman, James Dance and Walter E. Wied.

Program Committee—E. L. Luther, Chairman, James Vint, W. A. Duffy, John Jardine and J. G. Milward.

Local Arrangement Committee—Harry Noble, Chairman.

How to Plant Iris

Paper Given Before Milwaukee Society

MR. L. BURMEISTER

CULTIVATION. Iris should be planted in a sunny location in soil that is dry and well drained. Unlike the wild flag the garden iris cannot stand water around the roots. It must not be planted deep. The bulb, or rhizome, should be just below the surface of the ground, the roots spread out and the soil packed around them. No fertilizer should touch the rhizome. A very little well rotted manure may be applied to the surface of the ground. Bone meal and finely ground limestone are good fertilizers.

Iris soon forms big clumps with masses of rhizomes and roots, which are likely to rot. It is hard to keep grass out of these clumps. For these reasons iris should be taken up, divided, freed from grass roots and reset once in four or five years. The best time to do this as well as to make new plantings is soon after the blooming season.

July and August are probably the best months for planting iris but it may be planted any time during the year when not in bloom or when the ground is not frozen.

Suggestions for plantings. The sunny side of a shrubbery hedge is a good place for iris. Unlike the peony, it is not likely to suffer from being robbed of moisture and food by the larger plants. It is especially beautiful with lilacs or Spirea Van-Houttei as a background. All these bloom at the same time. The colors of the lilac harmonize with those of the iris and white of the Spirea bring out their beauty. As was suggested in the talk about peony planting iris is a good companion for the peony in a hedge which borders a walk or drive. At first the two flowers may be alternated. Then, when the peonies have come to need all the space the border may be widened and the iris moved to the front. Clumps of iris give color in a herbaceous border. After the blooming season the ragged tops of the leaves may be trimmed off and the foliage of the surrounding plants will partially cover them. They will thus not be unsightly in the border. For large grounds extensive plantings of iris will give wonderful effects. It may be planted in beds as borders of walks, drives or pools. Or beds may be arranged to form an iris garden which will be a joy for a month or more. In all plantings, large or small, the best results will be obtained by planting groups of one variety together, groups being so arranged as to harmonize with each other.

"Glads" Sell

F. F. ROCKWELL
Horticultural Editor, Farm & Fireside

IF YOU have a roadside stand, or a chance to sell to summer people, one of the most profitable of all possible sidelines is cut gladiolus blooms.

They sell well. Insects leave them alone. They require no spraying. Anybody can grow them. You can plant them in 3-foot rows and cultivate them like corn or potatoes, and nothing further is necessary until the flower stalks are ready to cut.

Second, several plantings may be made, so that a continuous supply of blooms can be had from the latter part of June until Labor Day.

I make my first planting in March or early April, just as soon as the ground is ready to work. They will not be injured by late frosts. Plant them when you put in your earliest potatoes or garden peas. The early varieties will bloom within 60 to 75 days after planting; medium sorts from 75 to 85; and late ones in 85 to 95. From a single planting, therefore, flowers may be had for just about four weeks. In any cool dry cellar, such as is used for storing potatoes, the bulbs will keep until July. So three plantings, made at intervals of a month, will provide cut blooms for sale from midsummer until frost.

Any good corn or garden soil will grow fine blooms. I use a fertilizer made up of one part each of bone flour, coarse bone and tankage. Any high-grade complete chemical fertilizer will answer if it is mixed with the soil so as not to come in contact with the bulbs. The furrows can be opened up and the fertilizer put in with a potato planter, with the covering disks removed. On a smaller scale a hand garden plow is convenient. Drop the bulbs two to four inches apart, right side up, and cover about four inches deep. Many growers cover five or six inches deep, making a ridge the same as for potatoes, and then rake down the tops of the ridges before the sprouts come through, to destroy the early crop of weeds. Gladioli, like cabbages or potatoes, thrive on frequent cultivation; and this should be kept up as long as it is possible to get through the rows.

The spikes should be cut when the first flowers are fully open and the stems immersed in water for several hours in tubs in a cool shed or cellar before being delivered.

Six varieties—two early, two medium and two late—will make a good assortment to start with. No. 2 bulbs, which can be bought considerably cheaper than No. 1, are practically as good for growing cut flowers. Some of the inexpensive varieties good for cut flowers are Le Marshal Foch, lavendar pink, an improvement over the old popular America; Mrs. Dr. Norton, a delicate appleblossom pink; Alice Tiplady, a salmon orange; Herada, a beautiful lavendar mauve; Prince of Wales, salmon, extra early; Early Sunrise, the finest of all the extra earlies; and Elizabeth Tabor, the earliest pink. The bulbs cost wholesale $10 to $40 per thousand, according to variety and supply; the flowers usually retail for 50 cents per dozen, often for twice that.—Courtesy *Farm and Fireside.*

LIME FOR FLOWERS

SOME of our garden flowers like lime or a sweet soil and some do not. Those which are benefited by lime are sweet alyssum, candytuft, carnation, galega, geum, impatiens, mignonette, nasturtium, pansy, poppy, sweet pea.

Then there is a group that will grow just as well in a sour soil, as in a sweet soil, or in other words are not affected much by acidity. These are: zinnia, saponaria, salvia, lychnis, lobelia gaillardia, digitalis, pinks, calendula, bocconia, asters, aquilegia, ageratum and achillea.

Then there is another group that really prefers a sour soil. Some of these are azalea, rhododendron, laurel, trailing arbutus, baptisia, lupine, marigold, tobacco, silene and others.

It is therefore difficult to state that soil should be limed. One must first know the requirements of the plant. This same rule holds in the case of vegetables.

To sweeten the soil some form of limestone may be applied such as ground lime rock or arsenic lime. For small amounts the common limate is probably the most easily obtained. The concentrated forms such as black lime or limate should be applied at the rate of 5 or 10 pounds to 100 square feet. This is best applied in the spring of the year.

If one desires to grow the plants that require an acid soil acid peat may be applied or a small amount of sawdust, oak leaf mold or aluminum sulphate at the rate of 1½ pounds to 10 square feet will give the desired results.

However, as a rule, a soil that has not had any lime and has been cropped for many years is usually somewhat sour. This can be determined more accurately, however, by a test with litmus paper. If the paper turns red when placed in contact with moist soil, it is acid.

Often, however, many people place too much emphasis on "Sour Soil." Too many times when plants do not do well, the verdict is "The soil is sour." In reality it may be a lack of humus and plant food in the soil or even some type of disease.

Wisconsin Horticulture

Published Monthly by the
Wisconsin State Horticultural Society
119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S.H.S., Madison, Wis.
Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

TRAILING ARBUTUS NUMEROUS AT WARRENS

AN ITEM from the Milwaukee paper states: "The first Trailing Arbutus plants to be received here in the mail this year, arrived from Warrens, Monroe County, on April 10th."

The editor while making arrangements for Wisconsin Strawberry Day at Warrens on April 17th saw a number of beautiful baskets of Trailing Arbutus in the Post Office, being sent to different places.

A basket of Arbutus in bloom is a beautiful thing. It is hoped that the shipment of these plants will not seriously effect the future growth of Arbutus in this vicinity.

THE STATE GARDEN AND FLOWER SHOW

BE SURE to read the description of the Wisconsin Garden and Flower Show which will be held at the Loraine Hotel, Madison, June 7-8-9. Three large rooms in the Hotel, ballroom, two banquet rooms, and also the mezzanine floor and lobby will be used to stage this exhibit. The Garden Club projects consisting of Shadow Boxes, Luncheon Tables, Window Boxes, Miniature Gardens, and Little Gardens, will be the feature of the Garden Club exhibit. About fifteen Garden Clubs are expected to take part in these projects.

The Commercial Gardens will probably be the most elaborate and beautiful of the show. They will represent rock gardens, wild flower gardens, perennial gardens, etc.

In addition there will be a large Iris, Peony, Rose, and Perennial Flower exhibit with ample premiums in each class.

This is the first attempt to put on a show of this kind in Wisconsin. All flower and garden lovers should unite to make it a success so that it will become an annual event.

VEGETABLE BULLETIN

"Commercial varieties of vegetables for New York State" is a new Bulletin just published by the Cornell Agricultural College which we recommend to vegetable growers. It was printed in October 1928 and deals with the best commercial varieties and their characteristics. (For a late variety of peas it mentions and illustrates the Dark-Podded Telephone or Duke of Albany and recommends it as the best late variety.)

The Bulletin has eighty-four pages and is profusely illustrated with comparative photographs of the different vegetables. It may be obtained by asking for Bulletin number 176, Cornell University, Ithaca, New York.

WISCONSIN STRAWBERRY DAY

Warrens, Saturday, June 15

The program for State Strawberry Day was planned at a meeting of the Secretary with County Agent Kuehning of Monroe County, and a number of Warrens strawberry growers.

The date was set for Saturday June 15. At that time some strawberries will be ripe but it will still be early for carload shipments, so growers can get away on Saturday.

THE PROGRAM

Meeting in Legion Hall

9:30—10:15	Discussion of Grades, A. W. Pommerening, Madison.
10:15—10:30	Marketing Problems, Rex Eberdt, Warrens.
10:30—11:00	Cooperative Marketing For Fruit Growers, M. B. Goff, Sturgeon Bay.
11:00—11:15	Growing Berries at Sparta, Earl Leverich, Sparta.
11:15—12:15	Fertilizers, Varieties and Grades for Strawberries, Prof. R. S. Colby, Urbana, Illinois.
12:30—1:15	Strawberry Shortcake Dinner. By Woman's Mission Circle—35c.
1:30—	Field Tour directed by County Agent Kuehning to outstanding strawberry and raspberry fields near Warrens to study various problems. Discussion of Disease and Insect Problems by Prof. R. E. Vaughan and E. L. Chambers, Madison.

CHERRY BLOSSOM FESTIVAL

THE Door County Cherry Blossom Festival is described in this issue. If you have never seen Door County in Cherry Blossom time do not fail to make the trip this year. Nowhere else in Wisconsin can you see such a large area in full bloom with such a beautiful setting as in Door County. One can travel for many miles and still be entirely surrounded by trees in full bloom.

NEW BULLETIN ON POLLINATION BY BEES

"Busy Bees Bring Bending Branches" is the title of a new bulletin written by H. D. Hootman, Secretary of the Michigan Horticultural Society and published by the American Bee Journal Hamilton, Illinois. The bulletin contains 24 pages and is profusely illustrated with pictures showing the results of pollination experiments conducted in Michigan on the value of bees in the orchard.

A chapter is also devoted to the proper care of bees. Our readers may obtain this bulletin by writing the American Bee Journal.

EFFECT OF THE HEIGHT OF PRUNING ON THE YIELD OF RASPBERRIES

THE April issue of the Minnesota Horticulturist contains a very fine article by Prof. W. G. Brierly of the Minnesota Department of Horticulture on the effects of different heights of pruning on the Latham raspberry. Lack of space will not permit us to publish the entire article in this issue.

The work was very carefully done and the weights of the raspberries were based on the number of canes per plot. The result showed that where the canes were pruned low, 15 inches, the total yield was almost cut in two. The canes pruned 36 inches and those pruned 60 inches gave almost the same results. The weights were as follows:

	Yield in pints per acre
Canes pruned to 15 inches	3,059
Canes pruned to 36 inches	6,490
Canes pruned to 60 inches	6,602

The effects of the height of pruning upon the weight of the berries during the picking season was also determined and it was found that the canes pruned to 36 inches gave berries of the most uniform weight and the largest size berries.

STRAWBERRY DAY FOR NORTHERN WISCONSIN

AS WE go to press, arrangements are being completed for a Strawberry and Raspberry Day to be held in Bayfield County. The program will be much similar to the one to be held in Warrens on June 15th, the forenoon being devoted to a discussion of the small fruit problem and the afternoon to field tours visiting some of the outstanding raspberry and strawberry fields in the nearby neighborhood. Full details of the meeting will be given in the June issue of Wisconsin Horticulture.

LA CROSSE COUNTY SOCIETIES HOLD MEETINGS

DURING the week of April 15 meetings were held by County Agent W. E. Spreiter of La Crosse County and the Secretary, with La Crosse County Horticultural Societies. This County has the largest number of rural Horticultural Societies in the state.

Meetings were held by the German Settlement, Browns Valley and Union Mills societies, whose members turned out in large numbers, the halls being crowded at each place. These societies have been meeting monthly for many years, and put on community horticultural shows in the fall each year.

At the meetings held in April Mr. Spreiter spoke on general farm problems while the secretary discussed varieties of strawberries and raspberries and showed a set of colored slides on the care of the apple orchard and landscape gardening.

THE BANANA TARIFF

THE National Horticultural Council, composed of Horticultural organizations in almost every state, is making a vigorous fight for the banana tariff.

Large profits due to low production costs in the tropical banana belts and no tariff have enabled banana importing concerns to put on a very extensive advertising campaign. This has increased the use of bananas 400% during the past few years. American fruit, especially apples are suffering from over production and low prices.

While bananas are not especially healthful, booklets with beautiful illustrations and wonderful descriptions are being passed out to the people by Public Health nurses and school superintendents. That isn't helping our own fruits, many of which have far greater value.

Members are asked to write to their Congressmen urging them to support the tariff program of the National Horticultural Council at once.

Just as we go to press we hear that the Assembly almost unanimously passed Mr. M. B. Goff's resolution asking Congress to put a tariff on bananas. The resolution will be voted on in the senate very shortly and is expected to pass.

Assemblyman Goff has been instrumental in the passage of a good deal of legislation beneficial to agriculture and schools. He is a member of the Agricultural and Educational Committee of the Assembly.

SUGGESTION TO STATE FLOWER SHOW EXHIBITORS

Mr. Alfred Boerner of the Milwaukee County Planning Department who has charge of the lay-out and design for the Garden and Flower Show suggests that all plants, shrubs and flowers for both the little gardens and commercial gardens be brought to the show in paper pots. They can then be placed in the correct position and covered with sand. The show management will furnish the sand and grass, also rocks for the gardens. This is a good suggestion and should be adopted by all exhibitors.

About the Home and Garden

MRS. C. E. STRONG, Editor, 877–79th Ave., West Allis

THE LORD GOD PLANTED A GARDEN

The Lord God planted a garden,
In the first white days of the World,
And set there an angel warden,
In a garment of white unfurled.

So near to the peace of Heaven,
The hawk might nest with the wren;
For there, in the cool of the Even,
God walked with the first of men.

And I dream that these garden closes,
With their shade and their sun-flecked-sod
And their Lillies and bowers of Roses,
Were laid by the hand of God.

The kiss of the sun for pardon,
The song of the bird for mirth;
One is nearer God's heart in a garden
Than anywhere else on earth.
—DOROTHY FRANCES GURNEY.

THE STATE GARDEN AND FLOWER SHOW

THE Wisconsin Federation of Garden Clubs will hold their first Flower Show in Madison, June 7–8–9. This Federation is young—very young, there is but a handful of clubs scattered throughout the state, but—like everything that is really alive, they are reaching out for new avenues of expression. They have visions of what can be done to beautify—but they likewise realize that nothing is done by visions alone, they must be presented to the world in such form as to be really an object lesson.

The officers of the Federation and some of the clubs felt that a Flower Show if rightly presented would be a very good way to spread the gospel of gardens, the love and use of flowers in and around homes, from the smallest cottage or apartment to the mansion.

Every club is urged to HELP. No matter how small or new the club, no matter how far away you may be—there is something you can do to make this show a real success.

Put yourself in the place of the Madison Garden Club who are working heart and soul for the show,—if it were to be held in your home town—would you not expect that the Madison club would help? It is no farther from your town to Madison, then from Madison to your town —just keep that in mind and plan to do as you will wish others to do for you.

We want this exhibit to be beautiful—it will be if we all do our share in bringing or sending the treasures of our garden, not all—just share them, a few if you do not have many, more if your garden is large.

Then the projects; these should be carefully thought out, every club working on these projects will be more than repaid by what they will have learned, for we all need to know more about artistic arrangement of flowers in bowls, baskets and vases; we need to give more thought to the plantings about our homes.

To my mind this Flower Show will be the real beginning of Garden Club work. At the show we are going to meet some of the growers whose catalogues we have studied carefully and wishfully. They are going to show us some of their ideas of a properly planted garden—rock gardens, wild flower gardens, perennial gardens, new and beautiful Iris, some of those Peonies we dream about—we are going to get many new ideas, they are going to find out what we are particularly interested in, we are both going to be helped.

Then we are going to meet other garden lovers, we will exchange experiences and methods, closer acquaintance will make it easier to work together, future projects can be worked out much better.

These are some of the things that will benefit us,—but this Flower Show is not for ourselves alone—we are to give help to others. There will be need of easily cared for window boxes, simple colorful table decorations, practical plans for little gardens that the beginner can undertake with confidence.

This is to be a real GARDEN show, do not use plants in your little gardens that cannot be used out of doors—simply to make your exhibit unusual or more decorative. These little gardens are to be a help to beginners not a disappointment.

The success of this show depends on you. Every club member who reads this; every flower and garden lover in the State should feel interested enough to help in some way.

YOU are going to HELP and the show WILL BE A SUCCESS.

State Garden Club Federation News

MRS. R. H. MALISCH, President
Hales Corners

MRS. C. W. VAUGHN, Vice-president
Madison

MRS. A. W. SPERBER, Sec'y–Treasurer
Hales Corners

THE GARDEN CLUB MOVEMENT

THE garden club movement is on the increase in Wisconsin. During the past few months a number of new clubs have been organized. All are doing well. The editor spoke at organization meetings of the Jefferson, Ft. Atkinson and Hartland Garden Clubs during April. Clubs have also been organized at Oconomowoc and Watertown, while in West Allis and Milwaukee new clubs are being formed. In Madison the Rosarians have organized.

Both the Garden Club Federation and the Horticulture Society will be glad to help new clubs, both by sending speakers and furnishing a suggestive constitution and information.

Mrs. C. L. Shaw, Elkhorn, Wisconsin, secretary of the Elkhorn Garden Club sent us a copy of the program of the Elkhorn club for 1929. This program is very neatly mimeographed and contained the topics to be taken up from January 4, to October 4, 1929.

We notice that in addition to a few good outside speakers who will give illustrated talks on gardening, the program consists mainly of topics by the members themselves, which is very desirable. We know of quite a few study clubs whose members report on topics a great deal more difficult than gardening topics.

In telling about the programs, Mrs. Shaw says, "The programs were made from a stencil by the commercial department of the High School here. They charged us only for the materi-

als which amounted to $2.00. We are very glad that you liked the program."

"Alpine Flowers and Rock Gardens" is a new book by Walter P. Wright which we have just received, published by Dodd, Mead, & Company, Fourth Avenue & Thirtieth St., New York City. It contains some of the most beautiful colored illustrations of rock garden plants we have ever seen.

The book is devoted to a discussion of the following topics: What Alpine Plants Are; Alpine Plants at Home in Switzerland; How to Form Rockeries; The Best Stones and Soil; Planting and Propagating Alpines; Alpines for Walls, Steps and Edgings; and Special Chapters On the Most Important Rock Plants.

We highly recommend this book to anyone interested in plants for rock gardens.

NEW CLUB AT HALES CORNERS

THE Hawthorne Garden Club was organized at Hales Corners on February 20th with Mrs. R. H. Malisch as president and Mrs. E. J. Godsell, secretary and treasurer and a membership of seven. The members voted to join the Wisconsin Federation of Garden Clubs. Two meetings have been held since February 20th and interesting programs heard, which included talks on rock and English gardens and a report from three of the members who visited the flower show in Chicago. At present all are working on garden plans from which it is hoped will evolve a model worthy to be exhibited at the flower show to be sponsored by the Wisconsin Garden Club Federation.

RACINE CLUB HEARS TALK ON EVERGREENS

"Evergreens" was the subject of an interesting talk given Tuesday night by Pedar Back, Racine nurseryman, at a meeting of the Racine Garden club in the library.

Mr. Back talked on the advisability of planting pines and other evergreens on waste land and worn-out farming land which is often left idle. He said that evergreens were the most satisfactory trees for planting on home grounds as they are beautiful in winter as well as in summer.

Fir, spruce, pine, arbor vitae, juniper and cedar are some of the most hardy evergreens, Mr. Back said, and advised the planting of cedar, arbor vitae, Pfitzeriana juniper for this locality.

"Evergreens should be planted in early spring or in September to assure successful growth," he said. "They must be well watered during the first month, and in December should be protected by leaves, straw or hay."

Frederick Meyer, president of the club, announced the possibility of a

surplus sale, and asked members to bring a list of their surplus plants at the next meeting, that they may exchange with other members. Mrs. Arthur Schacht, secretary, read an invitation extended to the Racine members to take part in the annual Wisconsin state flower show, to be held at the Loraine hotel, Madison, June 7 and 8. This promises to be the finest show ever held, according to those in charge.

Mrs. R. H. Malisch, secretary of the Wisconsin Garden club federation, is expected to be at Racine for the next meeting of the club on April 30.

Robert E. Lassen exhibited a rare species of evergreen last night, called the Daphne Cneorum, a broadleaf evergreen with pink, roselike blossoms. Mrs. W. L. Thorkelson contributed several hardy rose bushes which were distributed among the members.

The club went on record in favor of wild flower conservation.

ROSARIANS PRESENT PROGRAM AT MILWAUKEE MEETING

FRANK P. GILOTH

THE March Meeting of the Milwaukee County Horticultural Society was held March 26th, in the Trustee's Room, at the Public Museum.

Mrs. E. LeFeber opened the meeting with a Nature Poem which is the usual practice.

The Milwaukee Rosarian's had charge of this Meeting which consisted of a program on roses and was taken up in the following manner.

1. Species & History of the Rose: Huron Smith.
2. Soils & Fertilizers: H. Gutknecht.
3. Treatment on Arrival, Planting, Pruning & Cutting of Blooms: Mrs. Wm. Hopkinson.
4. Diseases & Pest Control: Mr. Isenring.
5. Winter protection: Mr. August Peter.
6. Understock, Dwarf & Trees: L. R. Potter.
7. Climbers & Varieties: L. R. Potter.

At this Meeting we had the largest attendance we ever had, and as usual it was time to go home before we realized it.

Editors Note: A number of the above papers were sent in by Mr. Giloth, and will be published in early issues.

HARTLAND CLUB MEETING

The Hartland Garden Club held its fourth meeting on Friday evening, April 5th. Interesting discussions on various topics suitable to the early spring season were followed by a clever demonstration made by the president, Rev. Hartwig, on transplanting very small plants. Each member of the club was presented with a fine bird house, this gift being due to the generosity of Mr. Otto Voight, of Milwaukee.

A special meeting of the club followed on the evening of the 10th, when Mr. Rahmlow, Secretary of the State Horticultural Society, Madison, gave a most interesting talk on garden club work, landscape gardening and native wild flowers, illustrating same with many beautiful pictures thrown on canvas.

—MISS MABEL LARSON.

RACINE CLUB HAS ILLUSTRATED TALK ON LANDSCAPING

"LANDSCAPE DESIGNING" was the subject of an interesting lecture given by the Racine Garden club at the Racine public library April 2. Mrs. Carroll Heft read the lecture, which was illustrated with 60 beautifully colored slides shown by E. F. Sanders of the Washington Park High school.

The pictures illustrated good and bad arrangement in foundation planting, front and back yard garden, rock garden, pools, embankment, naturalistic borders and garden accessories. At a short business session following the lecture Robert E. Lassen of the flower show committee said that while there is as yet nothing definite to report the committee is formulating plans and a midsummer flower show accessible to the downtown district is almost an assured fact.

Mrs. Arthur Schacht, secretary of the club, told of the flower contest being conducted this year in the Trautwein school district to encourage planting of flower gardens in every farm yard. The president, Frederick Meyer, announced that "Evergreens" will be the subject on the program for the next meeting.

MADISON ROSARIANS ORGANIZE

MADISON has a Rosarian Club. It was organized on April 2nd, for the purpose of promoting the interest and culture of roses. The members expect to meet once each month for an intensive program on different phases of rose growing.

The next meeting will be devoted to the discussion of Hybrid Tea Roses. Three members will report on the subjects of: No. 1, The best varieties of Hybrid Teas; No. 2, Growing and Fertilizing of Hybrid Tea Roses; No. 3, Diseases and Winter care of Hybrid Teas.

Mrs. Harvey Stagner, was elected as President, Mrs. H. E. Johnson, Secretary and Treasurer, and Mrs. J. A. Reed, Chairman of the Program Committee.

MILWAUKEE SOCIETY ELECTS OFFICERS

The Milwaukee Horticultural Society met Tuesday evening, April 23rd, at 7:30 P. M. in the Public Museum. This being the annual meeting the following officers were unanimously elected:

Mr. Huron Smith—President,
Mr. Fay Coon—Vice-President,
Miss Mable Thomas—Secretary-Treasurer

The program for the evening constituted a symposium on Lilacs, Spiraeas and Viburnums. Mrs. R. L. Malisch opened the meeting by reciting a poem entitled "Daffodils". Mrs. C. E. Strong gave a very interesting talk on lilacs which was followed by Mr. R. L. Potter who discussed French lilacs. Mr. Archie Hill gave an interesting talk on viburnums followed by Mrs. J. H. Paul. Mrs. E. C. Haasch and Mr. L. Burmeister gave an interesting talk on spiraeas.

The balance of the evening was devoted to remarks and discussion about the activities of the Milwaukee Garden Commission. —FRANK P. GILOTH.

Editors Note: We wish to express our appreciation to the Milwaukee

Society for sending in the papers presented at their meetings for publication in the magazine. Mr. Frank P. Giloth sends in the papers very promptly. However, the copy of the magazine is sent to the printer on the 20th of the month so the papers are not published as promptly as we would like. We wish also to compliment the Milwaukee Society members on their fine programs.

OSHKOSH SOCIETY MEETS

The April meeting of the Oshkosh Horticultural society was held at the Museum on Monday evening. After a delicious supper the program opened with the singing of the "Horticultural Song." Miss Una Brunka gave a piano solo "Tulips," and responded to the applause with an encore, "Sparklets." A committee was appointed to see the filling station owners and ascertain if they wish to enter the contest for beautifying their grounds. William Nelson gave an interesting talk on his trip to Texas and N. A. Rasmussen presented an instructive lesson on pruning. He gave demonstrations on pruning apple trees, bridal wreath and roses. The society was favored with a treat from Mr. and Mrs. George Jacobs, who are making an extended visit in Phoenix, Ariz. They sent pictures and a box of cactus candy.

THE SUM-MER-DEL GARDEN CLUB MEETING

MRS. M. M. DAY

A FEATURE of unusual interest at the April meeting of the Sum-Mer-Del Garden Club held in the Congregational Church, Hartland, was an illustrated lecture given by Mrs. M. R. Almon of Milwaukee on "Our Birds". She was assisted at the lantern by another bird authority, Mrs. Hiram Towns of Peewaukee Lake. The members were glad to profit by Mrs. Almon's exhaustive study and deep understanding of the nature and habits of birds and, stimulated by her talk will observe them more closely and desire a more intimate knowledge of them in future.

At the close of the talk bird anecdotes were called for and interesting experiences were related by Miss Lowerre, Miss Notbohm, Mrs. George, and Miss Moore.

The regular lesson on "Wild Flowers" which is being given most comprehensively by Miss Helen Moore was very interesting and cards were distributed illustrating six new kinds of wild flowers. Some of the members exhibited their note books, showing different arrangements for filing cards and specimens.

The calendar for the month was given by Mrs. Day and the members are urged to help make the calendar the club's own by contributing helpful ideas for garden work each month.

Mrs. F. W. Whitman, Chairman of the Garden Show, reported the activities of her committee and asked the members and their friends to plant now with the Show in mind. It will be held early in August.

After the meeting had adjourned a table of early flowers and favorite garden tools brought by the members attracted great attention. Delightful refreshments were served by the hostesses: Mrs. Bergwall, Mrs. Chapman, Mrs. Hornberg, Mrs. Schneider and Miss Larson.

GARDEN CLUBS IN FLOWER SHOW

Up to the time of going to press the following garden clubs have expressed their intention of exhibiting in the "Garden Club Project" classes at the State Garden and Flower Show.

Madison Garden Club
Madison Rosarians
Madison West Side Garden Club
Milwaukee County Horticulture Society
Hawthorne Garden Club of Hales Corners
Hartland Garden Club
Hillcrest Garden Club—West Allis
Ft. Atkinson Garden Club
Jefferson Garden Club
Elkhorn Garden Club
Kenosha Garden Club
Racine Garden Club
Lake Geneva Gardeners Association
Sum-Mer-Del Garden Club

A number of other clubs are expected to take part, so we have every assurance of a successful show.

VALUE OF VEGETABLES

The modern study of the chemistry of food has proved that vegetables are a necessity in the diet for the maintenance of good health and normal bodily functions. It has also been shown that the diet of a very large proportion of people is deficient in vegetables, particularly green vegetables.

One of the necessary elements in the body is iron, particularly in the blood. Vegetables will supply the need.

ON, WISCONSIN

The Loot of Spring

Assemblyman Goff has a bill to protect what? Profits, women, children, does, beaver? No, all these are good subjects, but this bill is to protect another and a different glory of Wisconsin—the trailing arbutus and the showy ladyslipper.

Time was, men would get a laugh out of that. Time was when it was a proof of big, husky manhood and rugged common sense to sneer at any wildflower as a "weed." Thank heaven such days are gone.

But with the days that held the arbutus a spring fancy for women and children, and the showy ladyslipper a pretty weed, are passing also these flowers. It is quite a stunt now to have arbutus in spring. Florists make a specialty of it. And every year whole beds are torn away, the source of beauty destroyed for one season's little sales.

And the showy ladyslipper that ought to be Wisconsin's pride is disappearing from every place that is near enough to a road for the looters of the woodland not to have too much trouble.

Many of us grew to maturity without any showy ladyslippers in our lives, and not much arbutus. We can weather the mutilation of the country as men endure the city scene of dingy walls and smoky chimneys. But why should we?

Wisconsin hasn't everything in the world, though it has so much. Here are flowers of which any state may be proud, if its people care for beauty.

Mr. Goff's bill won't save all the wild beauty, but it will help. It extends such protection as has been given the lotus—penalties for marauders in state parks or anywhere in the state south of the line, Manitowoc, Calumet, Winnebago, Waushara, Adams, Monroe, and La Crosse counties. North of this region they may not care, or it may be there is not much looting.

The warning signs against destroying the flowers that the conservation commission erects will not be just one more "Forbidden." What they really will say is, "Reserved—a little of this beauty you were about to destroy, for next year and the next generation." Milwaukee Journal.

Home Beautification at Spring Valley

CHAS. LOWATER

Looking South on Glade Avenue, Spring Valley, Pierce County "On the Hill."

HILLSIDES have their difficulties, but also their rewards, for those who must make beautiful homes there. The view shown is a glimpse of a hillside street in the little village of Spring Valley, bordered by land "set on edge" and well wooded, but with a number of attractive homes and beautiful home surroundings to show that it can be done.

Two difficulties confront the home beautifier here—we have only about a half day of direct sunshine, further reduced by the trees, and the steep grade causes the rainfall to run off instead of soaking into the soil. Selection of shade-loving plants, including many native woodland flowers, solves the first problem, and artificial watering partially solves the second. Water lilies do not blossom well in our pools, but our rock gardens do splendidly.

Spring Valley as a village has been roused to organized work in home beautification, mostly by the work of a few women of the village who have practiced what they are now preaching. The village supplied a large fraction of the membership of the County Horticultural Society organized last year, and has now organized a Home Garden and Flower Club under the auspices of the national association, with the following objects:

Flower garden contest for children;
Home beautification contest for adults, in two sections—village and rural community;
Improvement and planting of public grounds and park;
Clean-up and beautification of vacant lots and other neglected spots in the village;
Beautification of Main Street—flower boxes, etc.

One of the county flower shows will be held here in June—the peony and iris show—and we mean to also show a village in full bloom to the visitors who come from outside.

An interesting experiment is reported from Cornell University. Cabbage kept in the green house where the temperature was 70 degrees grew six years without producing a seed top and had produced six heads. At the end of that time the plant which was over six feet tall was taken where the temperature was 55 to 60 degrees and it then produced a seed top. Such experiments as this may explain the peculiar effects of an unusual season on plant growth.

Fertilizers for Fruit

C. J. CHAPMAN
College of Agriculture
Madison, Wisconsin

IN ARRIVING at the kinds and amounts of plant food necessary for the growing of good crops of quality fruits it is necessary first of all that we take into consideration the special and peculiar requirements of the soil on which our crop is being grown. Soils vary greatly in their native stores of plant food. Furthermore, the state of fertility, as affected by treatments previous to planting, is a factor which influences the kind and amount of fertilizer necessary. In a general way it may be stated that any soil which will respond to commercial fertilizers where this land was devoted to the growing of general crops will respond to commercial plant food treatment when planted to fruits, although the kind of fertilizer will be largely influenced by the particular kind of fruit and the requirements peculiar to these various species.

Soil Fertility Fundamentals

A knowledge of a few soil fertility fundamentals should be acquired first of all. Most of us know that dark colored soils are higher in their content of nitrogen than the lighter colored soils, and furthermore, that the sandy soils are usually lower in their content of available potash than the heavier silt loams and clay loams. Dark colored bottom soils are usually deficient in potash. This class of potash deficient soils includes not only the mucks and peats but the heavier Clydes and even the black sandy loams. We usually find that the darker colored heavy soils are high in their content of phosphorus. It is a pretty well established fact that soil acidity is an indication of a lack of lime and is usually associated with a lack of available phosphorus.

In this paper which Prof. Chapman presented at our annual convention, he discusses the different essential fertilizer elements crops need. He also tells of the effect on the tree or plant when a necessary element is lacking.

Legumes for Nitrogen

Another fundamental of vital importance in connection with a knowledge of soil management and the maintenance of fertility is the relationship which legumes bear to the maintenance of nitrogen in the soil. Most farmers recognize the importance and value of the leguminous crops, clover, alfalfa, sweet clover, soybeans, peas, vetches, etc., and where these legumes are grown in rotation and the leguminous hay crops fed on the farm, there is little need to worry over the nitrogen supply. However, farmers have been confronted in recent years with the problem of growing good crops of clover and other legumes and the lack of nitrogen has in many cases resulted in restricting the growth of non-leguminous crops grown in rotation. As will be discussed later, the desirability of growing legumes in the orchard is a debatable question.

Plant Food Requirements

It might be well further to consider the plant food requirements of some of our general crops and compare with the plant food requirements of some of our fruits. For instance a four ton crop of alfalfa requires about 190 lbs. of nitrogen, 43 lbs. of phosphoric acid, 178 lbs. of potash and 340 lbs. of lime as calcium carbonate. A 75 bushel crop of corn, plus stover, requires about 125 lbs. of nitrogen, 56 lbs. of phosphoric acid, 93 lbs. of potash and about 53 lbs. of lime as calcium carbonate.

A 60 bushel crop of oats requires, for both grain and straw, about 57 lbs. of nitrogen, 32 lbs. of phosphoric acid, 56 lbs. of potash and 23 lbs. of lime. The requirements of a 300 bushel crop of apples plus two tons of leaves, according to bulletin No. 8 by the Cornell Experiment Station, is nitrogen 54 lbs., phosphoric acid 13.4 lbs., potash 66 lbs. and lime as calcium carbonate, 127 lbs. This of course does not take into consideration the amounts of plant food used in the growth of new wood each year. It is apparent from these figures that an apple crop does not require as much nitrogen, phosphorus and potash as the other crops mentioned, but does require considerably more lime than oats or corn.

Nitrogen Needed Chiefly

From the foregoing we might draw the following conclusions comparing orchard crops with general crops grown in rotation. It is apparent that we must face the nitrogen problem from the outset. Some provision must be made to supply this element in order to secure the desired growth, since it is absolutely essential to the growing of any crop. The lack of nitrogen manifests itself in the yellowing of the leaves, a poor growth and a generally starved condition. The abundance of nitrogen, on the other hand, results in a light green color, a rank growth of new tissue and in general a thrifty, healthy appearance of foliage. The total nitrogen content of the light colored soils will range from 1500 to 2500 lbs. per surface eight inches per acre. The darker colored soils

will range from 2500 to 5000 lbs. per acre.

The use of legumes as cover crops to supply organic matter and nitrogen is a debatable practice. In the case of young orchards the growing of a leguminous cover crop may rob the trees of moisture in the early part of the season and thereby do more damage than good. In the case of the more mature orchard this may not be as serious an objection and if the crop is seeded in June and plowed or disced under the following spring it may serve both as a source of nitrogen and organic matter and furthermore check the growth of the new wood in late summer by tying up the moisture and plant food, desirable from the standpoint of maturing the new wood. Sweet clover is perhaps the best legume for this purpose. When the sweet clover is allowed to make its rank growth and mature the second year it will undoubtedly tie up large amounts of moisture and plant food in the early part of the season when the trees are most in need of these essentials.

It may therefore be better to supply the nitrogen requirements through the use of commercial fertilizers such as ammonium sulphate and nitrate of soda. The cost of these fertilizers is negligible as compared to the benefits derived.

Phosphates Needed for Fruits

The need for phosphate fertilizers is perhaps second to nitrogen in the requirements of fruits in general. Phosphorus is one of the first elements to limit production on the upland silt and clay loam soils in the state of Wisconsin where we are growing general crops. As was pointed out previously, the darker colored soils are generally higher in their content of total phosphorus, although where these soils are very acid the availability of the phosphorus is lower. The sandy soils and muck soils need phosphate in connection with potash fertilizers where the silt loams and clay loams need chiefly phosphorus. By reason of the fact that this element becomes available largely through the breakdown of organic matter in the soil, it is important that conditions be favorable for the decomposition of this material. It is for this reason that lime favors the release of available phosphorus on the darker colored acid soils, since the organisms, bacteria and fungi, which are responsible for the breakdown of organic matter are inhibited in their activities by reason of an acid soil. Phosphates should be worked in deeply. In fact it would be desirable on soils which are known to be low in their content of available phosphorus that this fertilizer be applied previous to establishing orchards or small fruit plantations. It should be worked in as deeply as possible. It was a practice in the early days to use some bone meal, in fact unground bone was frequently planted with young trees. Phosphate fertilizers, applied to the surface soil, are fixed very quickly by chemical reaction with iron, aluminum, and lime in the surface soil and the movement downward of this phosphate is exceedingly slow. Superphosphates may be applied in amounts up to one ton per acre where applied broadcast or in orchard rows previous to setting or establishing of trees or shrubs. There is practically no loss of phosphate through leach.

Phosphorus is closely related to the maturity of crops and the formation of seeds. We find that the phosphorus is ultimately stored in the seed of the crop, and in the case of general crops, the presence of plenty of phosphorus will result in hastening the maturity. Furthermore it stimulates root development. A liberal supply of phosphorus in the soil will result in more profuse setting of fruits and where supplemented with sufficient supplies of nitrogen and potash will result in a good set of fruit each year. The total phosphorus content in the soil ranges from 600 to 1000 lbs. per surface eight inches per acre for the lighter colored soils, the darker colored heavy soils being somewhat higher in their content of this element.

Potash Requirements Low

As previously stated, the heavy silt loams and clay loams are for the most part pretty well supplied with the element potassium. Sandy loams, mucks and dark colored soils in general are apt to be low in their content of potash. The necessity for using fertilizers containing potash is not so great in the growing of orchard crops or bush fruits as in the case of cultivated crops. The more extensive and deeper feeding root system of most of these crops enables them to secure their requirements for potash more easily than in the case of the more shallow rooted, cultivated field crops. It will be noted that the requirements of a 300 bushel apple crop for the element potassium is considerably less than for a 75 bushel crop of corn. Nevertheless in the case of sandy soils, dark colored bottom soils and mucks or peats it will be necessary to supply some potash fertilizer for any kind of orchard crop or bush fruit.

Potash hunger reflects itself in the stunted growth of many crops, the inability of the crop to produce the luxuriant foliage by reason of the relationship which potash bears to the formation of starches, sugars and cellulose. A lack of potash frequently reflects itself in a reddish colored tinge of leaf and a premature falling and drying up of leaves. On the other hand, the presence of plenty of potash produces more disease

resistant wood or fiber and it is the opinion of many horticulturists that there is a relationship between potash and color and quality of fruits. Many diseases are known to be directly related to a lack of potash in our cultivated crops, more particularly root diseases. It was the privilege of the writer to inspect a nursery where a tract devoted to young elm trees was suffering from a lack of potash. The unthrifty, scrubby condition of these trees growing on a dark sandy loam, gave evidence of potash starvation.

In the old orchards of the eastern states and Great Britain it has been observed that a disease known as Bitter Pit, or more commonly called Baldwin Spot in this country, has manifested itself in orchards where potash was deficient. However, I would point out that on the heavier silt loam and clay loam soils in the state of Wisconsin in general there will be but very little necessity for using potash fertilizers. These silt loams and clay loams contain all the way from 30,000 to 50,000 lbs. of the element potassium per surface eight inches per acre, while the sandy loams will run from 15,000 to 25,000 lbs. and the mucks and peats from 1000 to 3000 lbs. of the element potassium per acre. Of course it should be observed that a large amount of this potassium is tied up in crystalline mineral forms which are breaking down and yielding up available potash very slowly.

Stable Manure, Uses and Abuses

Stable manure is a good source of plant food; not only supplies the elements necessary for the growth of crops, but supplies organic matter as well. Too heavy applications of stable manure, however, will prolong the growing period of the tree or bush and result in immature wood, thereby favoring greater danger of winter killing. Nevertheless where stable manure is available it should be used as a source of plant food. Well rotted manure is preferable to the more strawy, coarse manure. It should be applied, where possible, in the late fall or during the winter or very early spring. Never apply stable manure during the summer period.

Straw Mulches

Strawy manure, shavings or even cornstalks should be used judiciously. It has been found that the presence of this fiber material stimulates greatly the activity of certain forms of fungi, which in turn feed heavily on the nitrogen reserves of the soil and tie up this element during the earlier part of the season at the very time when the crop requires nitrogen most. Furthermore, after this strawy fiber has been rotted and decomposed these organisms die and yield up their nitrogen, causing late summer growth which is of course to be avoided.

Cover Crops and Clean Cultivation

Where there is an excess of nitrogen or where the supply of nitrogen carries on through the summer period either due to applications of stable manure, or excessive applications of commercial fertiliers, it is possible to check the growth of tree or bush through the establishment of a cover crop in late summer or fall. Oats or buckwheat may be used for this purpose and are preferable to rye or winter wheat since the former are killed by winter freezing. Furthermore these cover crops have value in protecting the roots of trees or bushes and lessening the danger of winter injury and also add some organic matter to the soil.

Where clean cultivation is practiced in orchards it should be done at regular intervals but should be discontinued by the middle of August, and cover crops seeded in order to prevent late growth. The cultivation of the soil of course makes conditions more favorable for nitrification and the breakdown of plant food in the soil and helps conserve moisture.

General Recommendation

Orchards in sod will require larger amounts of nitrogen fertilizer than orchards where clean cultivation is practiced. Leguminous crops, cover crops, such as sweet clover, alfalfa, soy beans, etc., are desirable from the standpoint of increasing the nitrogen content of the soil but may be detriment from the standpoint of moisture supply. Where the crop is removed it adds but very little nitrogen. Nitrate of soda or sulphate of ammonia should be applied two weeks before the blooming period in the spring at rates of from one-half pound to five pounds per tree, depending on the age and size of the tree. This fertilizer should be applied broadcast around the tree at least to the outer extremities of the root system, about as a large doughnut or lifesaver might encircle a tree. These nitrogen salts are very soluble and are quickly carried down in the ground water. Where the soil is sandy in nature, in fact on the heavier soils, there may be some loss due to leach during seasons of excessive rainfall. Do not apply nitrogen fertilizers later than April or May. Where phosphate fertilizers are applied they should be worked in as deeply as practicable without injury to roots. Phosphates may have an indirect value in that they will increase the growth of the cover crop, either leguminous or non-leguminous, and thereby increase the supply of organic matter in the soil. Potash for this same reason may be of value and will most certainly be needed on the sandy soils and dark colored bottom soils.

ONION MAGGOT CONTROL

PROFESSOR A. G. RUGGLES
Division of Entomology,
St. Paul, Minn.

THE most effective control measure yet developed for the onion maggot is spraying with Bordeaux oil emulsion. This is made by adding to 48½ gallons of the regular 4-4-50 Bordeaux mixture, 1½ gallons of lubricating oil stock emulsion. The oil stock emulsion is made by bringing to a boil and then pumping the mixture over several times.

Light grade lubricating oil, 1 gallon.

Water, 1 quart.

Potash fish oil soap or potash vegetable oil soap 1-2 pounds.

A modification of this Bordeaux-oil emulsion used in Minnesota last summer was:

4-4-50 Bordeaux Mixture, 49½ gallons.

Dendrol, 2 quarts.

Nicotine sulphate, ½ pint.

Five applications of this spray given at weekly intervals, commencing when the plants were one inch high, gave practically a perfect control of this pest. As the plants get larger, it would probably be better to use two nozzles to the row so that the plants will be thoroughly covered.

Another remedy giving partial relief is the trapping of the first generation maggots. This is accomplished by planting cull onions around the margins and at intervals through the field. As these onions come up faster the flies are attracted to these and here the eggs are laid. Later the culls may be destroyed by spraying with cheap oils, using about one gallon to 25 feet of row.

Note: 1. In place of the four pounds of stone lime used in the 4-4-50 Bordeaux mixture, 6 pounds of hydrated lime may be used.

2. The nicotine in our formula will also control the onion thrips.

3. Dendrol is a Standard Oil product and may be purchased at their filling stations.—*Courtesy Minnesota Horticulturist.*

Growing Strawberries at Warrens

A TRIP to Warrens and Sparta, Wisconsin during the strawberry season will be of interest to our readers.

These two sections make Monroe County the largest small fruit production center in Wisconsin. From 25 to 30 carloads of strawberries are shipped from Warrens alone each year.

Ask a grower if there is money in growing strawberries and he will no doubt answer that the acreage would not be increasing if it did not pay.

Four varieties of strawberries are being grown, the Beaver, of which the acreage is steadily increasing, the Premier, Senator Dunlap and Warfield. The last two varieties have been the old standbys for many years, and are still holding their own. The Warfield having an imperfect flower is usually always grown in alternate rows with Dunlap and the two give good results.

The Beaver and Premier are new varieties with considerable promise. The acreage of both is steadily increasing. The Beaver is unusually good for shipping and canning. In trying out new varieties most large growers keep the favorite old varieties for comparison which is the reason so many in the Warrens section are growing the four varieties named above.

The largest grower in the Warrens section and perhaps the largest small fruit grower in Wisconsin is Dr. J. G. Seidel. He has five acres of strawberries and six acres of raspberries. He is growing largely Premier and Beaver strawberries while in raspberries he grows only Latham, which he considers superior to all others, He says the most important item in handling the Latham is to lay them down in the fall by bending them over and placing dirt on the tips.

Another large grower in the district is Louis West who has six acres of Beavers. Henry Morse who grows about two acres of Beavers, handles most of the berry boxes for the growers, shipping in five or six carloads every spring.

Other large growers in the district are John Jensen, who grows Beavers, Warfield and Dunlap and John Olson who and Warfield. These four varieties are also grown by H. E. Newlin, John Butterfus and Rex Eberdt.

H. H. Harris and Son grow the above four varieties and in addition have about 12 or 15 other varieties on trial. Mr. H. H. Harris has no doubt tried out more varieties than any other grower in the state.

Mr. Erne Gilson grows the Reynolds in addition to Beaver and Premier.

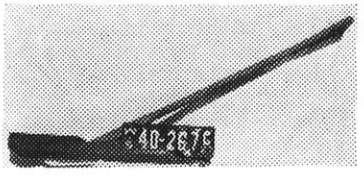
The marketing of most of the crop is done through the Warrens Fruit Growers Association of which Mr. Rex Eberdt is President and manager. He is also a large grower, having the four leading varieties.

During the past few years the Association has been doing very good work in grading the berries. Each crate is stamped with the grade of the berries it contains. This has enabled the Association to furnish very high quality fruit to those who wanted it, thereby not only obtaining a better price for the growers but also establishing a reputation for being able to furnish a high quality berry.

Be sure to read the program for the State Strawberry Day to be held at Warrens June 15.

—Janesville Gazette photo

Allen B. West, Milton Junction, finds pruning apple trees and picking the fruit is easier since he built this high ladder on wheels. The device was designed at the University of Wisconsin and there are only a few in use in this county.



—Janesville Gazette photo

For marking rows for plants and seeds in his garden, Allen B. West has invented this interesting tool. As it is pushed across the garden a trench is dug, and Mr. West says it is a great saving of time compared with the usual method of using stakes, string and a hoe.

OLD-TIME HAT PIN IS CALLED BEST TO FIGHT IRIS BORER

"An old fashioned hat pin (if you can get one) is the surest weapon to fight the iris borer," Louis R. Potter, amateur gardener, told members of the Milwaukee County Horticulture society at the public museum Tuesday.

"The iris pest, the caterpillar, has 13 sections to its body, but any spot is vulnerable," said Mr. Potter.

Plans of the society for a series of municipal gardens was disclosed. In time there will be demonstration plots in all city parks where the finest roses, iris, dahlias, gladiolas and peonies will be bred. More than $1,200 worth of iris is ready for spring planting. City Forester O. W. Spidel has not yet decided to what park the iris will be transplanted—Milwaukee Journal.

The Michigan Experiment Station reports that a row of barley planted between every fifth and sixth row of onions will protect them fairly well from blowing out in the spring.

"Creation by Evolution," published by the McMillan Company, is highly recommended as a means of becoming acquainted with this subject.

YOUR SPRAY

Slighting it Imperils Your Whole Crop "Chain"

You have money tied up in your orchard and your spray rig. And certainly labor represents a heavy expense item.
Don't imperil the whole investment by experimenting with unknown and untried spray materials. For your "mix" use GRASSELLI Insecticides and insure **certainty.**
This is of major importance because spraying is unquestionably the most important thing the grower does to insure the maximum of first grade fruit.
There's a Grasselli dealer near you. If you don't know his location, write us.

THE GRASSELLI CHEMICAL CO. Inc.
CLEVELAND

Branches in 19 Cities

Canal and 16th St. viaduct, Milwaukee, Wisc.

GRASSELLI GRADE
A Standard Held High for 90 Years

French Lilacs

R. L. POTTER
Milwaukee Society

THE lilacs of today, are different from the lilacs of yesterday (which covers all other lilacs, Vulgaris and other species) in that the bushes themselves are small in comparison, while the flowers are larger and finer on French Lilacs than those on any other variety.

French Lilacs, besides being smaller than others and therefore fitting better the modern back or front yard, are also finer in color, arrangement and size of bloom and in variety of color and shape of bloom. They come into bloom when the bushes are quite young and much earlier than the other lilacs.

Because of the above facts and because all lilacs are exceptionally long lived, the home owner should, when planting, use care to plant only the best because they will be with him or her for many years to come.

There are about 350 different varieties of French Lilacs in existence at the present time, of which about 60 are exceptionally good.

Many of the 60 best French Lilacs cannot be purchased as yet, due to the fact that few nurseries list them, but the better nurseries are more and more growing these better things, so that it will not be long before quite a few nurseries will list most of them. Today at three places practically all of them can be obtained in America.

While so many varieties in any plant is confusing, yet in French Lilacs, it is justified by the vast superiority of the shape of the bush as a shrub and bloom, and by the much longer and later season of bloom and also because of the changeability of color. Many of the French Lilacs open in one color and then change to another even more beautiful and finer.

French Lilacs are really hybrids. They are so called, because the first and finest hybrids came from a Frenchman, Victor Lemoine. His work has been carried on and improved by his son, the famous Emile Lemoine. Many others have followed and tried to duplicate these two, but the best of the French Lilacs today, are those originated by V. Lemoine and Son of Nancy, France.

French Lilacs, like all lilacs, love a sweet soil, so if the soil is not a good clay, feed it liberally each year with air slaked lime. French Lilacs love moisture in moderate quantities, so be sure that the soil is porous and if not so, make it so, with rotted manure, sifted coal ashes, building sand or any form of humus, commercial as peat moss, or what you find in the woods as leaf mold, or even hardwood leaves. This humus is very necessary for lilacs to allow proper root growth to develop.

French Lilacs are gross feeders, but do not want their food dealt out rapidly. That will cause them to go entirely into wood with little bloom. Bone meal, hard wood ashes, powdered rock phosphate, dried blood and well rotted manure are all good.

To enable them to get the benefit of moisture and food, the soil about them should be kept well cultivated at all times, to conserve the moisture. This cultivation will keep out weeds, which will, besides preserving moisture, conserve the food for the Lilacs alone.

The chief and only trouble of all lilacs is the oyster shell scale. A delayed dormant spray of lime sulphur in the regular mixture or a delayed dormant spray of any good miscible oil, if applied on sunny days in the morning or early forenoon will eradicate this trouble.

The worst insect enemy of lilacs is the borer. The only effective treatment for this pest, is to prune below the place of damage, or insert a sharp wire to kill the borer, or pour carbon bi-sulphide into the hole with an immediate application of putty over the hole. Unless the putty is applied the carbon bi-sulphide will evaporate. Be sure that the plant is well cultivated and well kept as borers seldom appear except on diseased or poorly kept bushes. The sign of the borer is a small hole with slight white exudation about it. Also the leaves on the branch affected will turn to light green or light yellow.

French Lilacs need little pruning; only enough to shape the bush and to thin. Thinning out, shaping and cutting away of dead wood should be done immediately after blooming, because from that period until fall the new bloom for next year develops.

Lilacs come either from own root or grafted. Own root plants are always good, but terribly expensive and no better than grafted ones, if the rootstock is privet or ash. All other forms of rootstock on French Lilacs have so far proven worthless.

The following is a list of practically all the good French Lilacs in existence. There are a few just as good in bloom but inferior in bush, which have been left out.

White

Single—
Jan Von Tol, Mont Blanc
Double—
Miss Ellen Milmott, Edith Cavell, Dame Blanche, Jeanne DArc.

Pink

Single—
Croncels, Lamartine, Lucie Baltet
Double—
Adelaide Dunbar, Belle de Nancy, Leon Gambetta, Leon Simon, Michael Buchner, Mme. P. Morel, President Fallieres, Vauban, Waldeck-Rousseau, Wm. Robinson.

Red & Purple

Single—
Diderot, Edmond Bossier, Toussaint L'Ouverture, Vuncan.
Double—
Mrs. Edw. Harding, Pres. Poincare, Thunberg

Blue

Single—
Compte de Montebella, Decaisne, Goliath
Double—
Kathryn Havemeyer, General Pershing, Marc Micheli, Victor Lemoine.

Lilac

Single—
Christophher Columbus, Hugo Koster, Jules Calot, Pascal
Double—
Alphonse Lavelle, Berryer, Oliver de Serres.

Best Eleven

Single or Double—
Leon Gambetta, Miss Ellen Willmott, Thunberg, Pres. Poincare, Mrs. Edw. Harding, Pres. Fallieres, Kathryn Havemeyer, Jan Von Tol, Compte de Montebella, Wm. Robinson, Decaisne.

LABOR SAVERS IN GARDEN AND ORCHARD

ALLEN B. WEST
Milton Junction

I HAVE often read books and papers devoted to gardening, lists of tools necessary or convenient for the gardener. However, I have never seen mentioned a simple tool I have found to be very useful and a great timesaver. I call it the garden marker. It is one that is easily constructed and one that does away with the garden line.

Description

It consists of a piece of 2 by 4, about three feet long, which forms the body of the tool. One edge of this body and one end is chamfered so as to make a sharp angle. A suitable handle (mine is from a discarded snow shovel) is securely fastened to the other edge at such an angle that when the gardener is standing erect the marker is resting its entire length on the ground. A strip of sheet metal (an old auto license plate is suitable) is nailed to each side of the body back of the handle and extending upward from the bevel. These sheets are bent outward so as to form wings at the rear of the marker.

Set stakes about 20 feet apart in line for the first row. Reset the first stake as the first stake of the second row and place the edge of the marker over the hole pointed toward the second stake. Shove the marker, being careful to keep it in line with the stakes and giving it enough downward pressure to secure the required depth of furrow until it reaches the second stake. Reset this stake by measure so as to give the right width of row. Continue to the third stake as before and reset this stake. Proceed to the last stake of the row in the same manner. The first row is now marked and the stakes are set for the second row. A straight groove has now been made, if the work has been carefully done, the entire length of the row, with any lumps of dirt encountered shoved aside and deep enough for planting smaller seeds, such as lettuce, radish and onion. When larger seeds are to be planted another tool is found convenient.

INDEX TO ADVERTISERS

	Page
Albrights Nursery	286
American Forestry Co.	286
Bolens Tractor	258
Chequamegon Gardens	287
Christensen, H. C.	258–286
Cleeremans Hatchery	286
Cream City Chemical Co.	288
Cumberland Fruit Pkg. Co.	285
Dewalt's Gardens	258
Eschrich's Nursery	258
Fitchett Dahlia Gardens	286
Floriadale Gardens	258
Gifford, F. R. o.	287
Grasselli Chemical Co.	283
Hauser, J. F.	287
Hawthorn Gardens	286
Hecklinger, Fred	258
Jackson, Mrs. Earl	258
Joelson, Mrs. Alfred	258
Kniskern, S.	286
Moser, Theron M.	258
Olson, John	286
Rasmussen's Nurseries	287
Schmidt Nursery	258
Sisson's Peonies	288
Standard Engine Co.	286
Stoddard, C. E.	286
Stonecrest Gardens	258
Strands Nursery	258
Sunset Farm	258
Terrell's Aquatic Farms	286
Toole, W. A.	288
White Elm Nursery	285

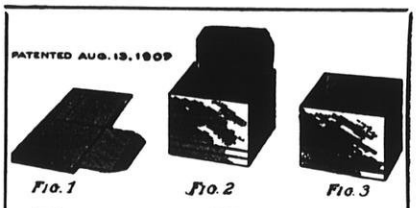


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

White Elm Nursery Co.

Hartland, Wisconsin

General Line of

Ornamentals and Fruits

Planting

Planting as well as marking and furrow opening is best done two rows at a time. When one treads in the seeds he can use one foot for each row on the outward trip and rake in the covering on the return trip.

Check Rowing

When small patches of corn are to be check rowed it is but a short operation to run the marker back and forth in both directions until the plot is nicely checked.

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

NURSERY STOCK—SHRUBS

NURSERY STOCK FOR SALE. American Arbor Vitae, many sizes at reasonable prices. Send for large lists and planting directions. Order early for spring time planting. American Forestry Co., Pembine, Wisconsin.

APPLE SEEDS—Fresh and clean. Will sell while supply lasts at $1.00 per lb. American Forestry Co., Pembine, Wis.

TREES AND SHRUBS FOR ORNAmental and landscape planting. Write us for lists and prices. American Forestry Co., Pembine, Wisconsin.

ADVERTISERS WANTED

If you wish to bring your product to the attention of 3,000 horticulturists advertise here. Rates very low.

HOLLYHOCKS

SOME EXTRA CHOICE MIXED Hollyhock plants at $6.00 per hundred. 25 for $1.50. All inspected stock. H. B. Blackman, Richland Center, Wisconsin.

LILY BULBS

REGAL LILIES. Nice blooming bulbs $2.00 per doz. Extra large size $3.25 per doz. Post paid. H. C. Christensen, 1625 Ninth St., Oshkosh, Wis.

WATER LILIES, ORNAMENTAL Water Plants, Berry-bearing shrubs and Plants for attracting birds, etc. Write Terrell's Aquatic Farm, 1006 W. Blk., Oshkosh, Wis.

STRAWBERRY PLANTS

STRAWBERRY PLANTS—Warfield, Dunlap, $5, thousand; 60c hundred. Beavers, $8, thousand; $1, hundred. Government inspected. C. E. Stoddard, Warren, Wis.

STRAWBERRY PLANTS for sale. Dunlap and Warfield $4.00 per 1,000; 50¢ per 100. Premier $5.00 per 1,000; 65¢ per 100. Beavers $7.00 per 1,000; 75¢ per 100. All plants Government Inspected and packed in moss insuring safe delivery. Order early. John J. Olson, Box 115, Warrens, Wis.

OUR CHICKS PAY

LEEREMAN'S
Quality Accredited
HICKS
Are Money Makers. Place your order with us and decide for yourself.
CLEEREMAN'S HATCHERY
Green Bay, Wis. R2J
Life Member W. S. H. S.

KING RED RASPBERRY PLANTS. State Inspected. $5.00 per hundred. Hawthorn Gardens, Green Bay, Wis. Route 6.

EVERGREEN TREES—Many varieties for home planting. Send for price lists. American Forestry Co., Pembine, Wisconsin.

POSITION WANTED

Young lady, graduating from University of Minnesota this spring, wants position with landscape gardener or nursery for experience before taking landscaping course. Write Wisconsin Horticulture, Washington, Bldg., Madison, Wis.

FOR SALE—NIAGARA DUSTER—Model U 25 on skids equipped for orchard work; practically new, $75.00. F. B. Sherman, Edgerton, Wis.

PANSY PLANTS IN BLOOM, 50 CENTS per dozen postpaid. Sunset Farm, Eau Claire, Wis.

EVERGREENS
All kinds of trees and Evergreens for sale at reasonable prices.
Write for prices.
S. KNISKERN
Middle Inlet, Wisconsin

Hardy Northern Grown
Nursery Stock
Write for price list
ALBRIGHT'S NURSERY
Superior, Wis.

Grow our peppy sandgrown gladiolus. Have all size bulbs and plenty of bulblets. Closing out some choice varieties. Get a bargain on something you have been wanting to try.
Lilium Tenuifolium seeds, 500—$1.00. As easy to grow as beans.
The Far North Gardens,
Iron River, Wis.

STANDARD GARDEN TRACTOR
Plows Seeds Cultivates Mows Hay and Lawns
A Powerful Tractor for Small Farms. Gardeners, Florists, Nurseries, fruits Growers and Poultrymen
DOES 4 MEN'S WORK
Walking and Riding Equipment.
Does Belt Work.
Free Catalog.
STANDARD ENGINE COMPANY
3241 Como Ave. Minneapolis, Minn.

We aim to grow

Good Dahlias

Bulbs that will produce in your garden blooms as good as—or better than—you saw in our garden or at our various exhibits last fall. Catalogue on request. Early orders accompanied by cash receive a special premium.

Fitchett Dahlia Gardens
735 E. Milton Avenue
JANESVILLE, WISCONSIN

TABLE OF CONTENTS

	Page
Federation to Stage Flower Show	259
Success With French Endive	263
Honey-Bees Increase Cherry Yields	264
North Dakota Notes	265
Why Breed New Varieties (Continued from April issue)	266
Door County Cherry Festival	268
Experiences in Use of Tree Wound Dressings	269
Potato Growers to Organize	270
How to Plant Iris	270
"Glads" Sell	271
Trailing Arbutus Numerous at Warrens	272
State Garden and Flower Show	272
Wisconsin Strawberry Day	272
The Banana Tariff	273
About The Home and Garden	274
Garden Club Federation News	275
Value of Vegetables	277
On Wisconsin	277
Home Beautification at Spring Valley	278
Fertilizers for Fruit	279
Onion Maggot Control	282
Growing Strawberries at Warrens	282
Club Root of Cabbage Can Be Prevented	283
French Lilacs	284
Labor Savers in Garden and Orchard	285

SPRAY MATERIALS

Lime sulphur solution
Lead arsenate
Dendrol

PRUNING TOOLS

Saws Shears
Pole Pruners

FERTILIZER AND LIME SPREADERS

Nitrate of Soda
Sulphate of Ammonia
Mixed Fertilizers
Geyer End Gate
Spreaders

F. R. GIFFORD CO.
2201 University Ave. Madison, Wis.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

Special Offer

Oshkosh Strawberry

We are offering this remarkable strawberry for the third season and have an extra fine lot of plants for Spring planting.

Special price $5.00 for 200 plants (Last year Oshkosh sold at $5.00 per 100)

Write for catalog of Fruit and Shade Trees, Ornamental Shrubs, Roses, Perennials, Vines, Small Fruit Plants, etc.

We specialize in better Delphiniums

RASMUSSEN'S
Fruit Farm and Nurseries
Oshkosh, Wisconsin

Try Our Special Selected Sweet Scented Hybrid Lupines

One Dozen $3.90 post paid

We specialize in Perennials

Send for our new illustrated Catalog

Chequamegon Flower Gardens
V. E. Brubaker, Prop.
Washburn, Wis.

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which described as well as dozens of Hardy Perendainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

ORDER NOW
Cream City Spray Materials

Lime Sulphur
(Liquid and Dry)
Arsenate of Lead
Calcium Arsenate
Bordeaux Mixture
(Paste and Dry)
Potato Special
Corrosive Sublimate
Formaldehyde
Cabbage Special
(Maggot Killer)
Black Leaf 40
Nicotine Dust
Weed Killer

Products of

Cream City Chemical Works

766–774 Kinnickinnic Ave., Milwaukee, Wis.
Phone Hanover 1117

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

Vol. XIX JUNE, 1929 No. 10

COMING EVENTS
Fruit Growers Convention, Sturgeon Bay, July 12-13.
Wisconsin Strawberry Day, Warrens, June 15.
Small Fruit Day, Menomonie, June 14.
Northern Wisconsin Strawberry Day, Bayfield, June 18.

EVERGREENS

All kinds of trees and Evergreens for sale at reasonable prices.

Write for prices.

S. KNISKERN
Middle Inlet, Wisconsin

Hardy Northern Grown
Nursery Stock
Write for price list
ALBRIGHT'S NURSERY
Superior, Wis.

BARGAINS

100 finest Gladiolus Bulbs $2.00 F. O. B. or $2.25 postpaid, 10 varieties 10 each. Spring delivery.

30 popular Iris roots, 5 each 6 kinds for $2.25. Postpaid April—July—August delivery.

6 Peony roots, 2 red, 2 white, 2 pink for $3.00 postpaid. Sept.—Oct. delivery.

STONECREST GARDENS
Eau Claire, Wis.

Send for catalog. It's free.

Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

White Elm Nursery Co.
Hartland, Wisconsin

General Line of
Ornamentals and Fruits

Dahlias—Gladiolus—Perennials

4 good Dahlias (named, labeled)	$.75
100 Gladiolus (1 inch, assorted)	1.00
1 doz. perennials (assorted, labeled)	1.25
Or, entire list above, postpaid for	2.25

May we send you our price list?

DEWALT'S FLAMBEAU RIVER GARDENS
Ladysmith, Wisconsin

Special Offer

Oshkosh Strawberry

We are offering this remarkable strawberry for the third season and have an extra fine lot of plants for Spring planting.

Special price $5.00 for 200 plants (Last year Oshkosh sold at $5.00 per 100)

Write for catalog of Fruit and Shade Trees, Ornamental Shrubs, Roses, Perennials, Vines, Small Fruit Plants, etc.

We specialize in better Delphiniums

RASMUSSEN'S
Fruit Farm and Nurseries
Oshkosh, Wisconsin

We aim to grow

Good Dahlias

Bulbs that will produce in your garden blooms as good as—or better than—you saw in our garden or at our various exhibits last fall. Catalogue on request. Early orders accompanied by cash receive a special premium.

Fitchett Dahlia Gardens
735 E. Milton Avenue
JANESVILLE, WISCONSIN

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS
President
C. J. Telfer, Green Bay
Vice-President
M. B. Goff, Sturgeon Bay
Secretary
H. J. Rahmlow, Madison

The Door County Fruit Growers Union

H. W. ULLSPERGER
General Manager
Sturgeon Bay, Wisconsin

FARMERS everywhere are looking for more renumerative markets, and naturally turn to cooperative marketing as the panacea for curing all ills. Little do they realize that the road to successful cooperative marketing is rough and stony and many obstacles must be hurdled. A successful cooperative does not develop over night but is built through many years of trials and tribulations. Numerous cooperatives fall by the wayside, but those that remain are usually strong and render excellent services. You have in your state one of the most successful of these cooperatives, "The Land O' Lakes Creameries," doing an immense volume of business. This cooperative should serve as an example for others, yet no two can be alike. The Door County Fruit Growers Union has had the usual difficulties inimical to cooperatives and today is in a stronger position for overcoming these obstacles. We hope that some of our experiences will help others.

Early History

The first marketing organization in Door County was started in 1897 for marketing strawberries. This organization, however, did not long survive. The next organization was incorporated in 1910 as the Door County Fruit Exchange. Four years later, the small growers withdrew from the Fruit Exchange and organized the Fruit Growers Association. The chief difference between the large and small growers was in the method of voting. The large growers wanted voting according to the number of shares of stock held; the smaller growers championed the "one man, one vote principle." They separated. Two growers' associations marketed fruit during 1914 and 1915. Unnecessary duplications resulted; and buyers played one organization against the other, beating down the price with the result that growers of both organizations lost thousands of dollars due to their inability to agree on basic principles. During 1916 a joint sales organization was formed and in 1917 the Door County Fruit Growers Union was incorporated and served as a sales company for both large and small growers. All growers fully realized, after the experiences of 1914 and 1915 that cooperation paid big dividends.

Herman Ullsperger

This paper was given by Mr. Ullsperger at the annual convention of the Minnesota State Horticultural Society last November. It is a very comprehensive statement of the organization early history and policies of the Door County Fruit Growers Union. It is printed by permission of the Minnesota State Horticultural Society.

Two years later, in 1918, the Fruit Growers Canning Company was organized to take care of surplus cherries that could not be sold as fresh fruit. Cherries were now sold as fresh fruit and canned foods. The fresh fruit market was limited. Acreage in cherries had increased rapidly. The fresh fruit market would not absorb these additional cherries. Canning this

surplus permitted the fruit growers to establish and maintain a firm price on fresh fruit, a policy which is still in effect today, ten years after it was inaugurated. To illustrate, the price of a 16 quart crate of cherries in 1928 was $2.60. That price was maintained throughout the entire season regardless of market fluctuations. Michigan cherries sold for less, but our prices did not decline. If our cherries do not sell at this price they are placed in cans.

Centralized Control Necessary

No cooperative can exist where management is divided or where serious differences prevail amongst members. From 1918 to 1924 we had two companies each with a separate manager, a separate Board of Directors and separate control. The two companies worked together harmoniously for several years, but in 1923 some friction developed, so in 1924 another change was made and both companies were placed under one manager, operated and controlled by a joint board of directors of sixteen members with an executive board of five members in immediate control. This system is in force today. We have learned through costly experiences that control must be centralized just as the Allies discovered during the World War that the war could not be won until one General was placed in full command of all allied armies.

A Cooperative Must Sell a Product of Good Quality

A cooperative cannot be successful unless it has a product of good quality to sell. You may say cherries are cherries, there is no difference. That is not true. Size is important; good flavor is essential; and good color makes them attractive in appearance and pleasing to the eye. Uniformity in size also promotes increased sales. We carry on an active educational campaign with the aid of our County Agent and Agricultural Experiment Station, through bulletins and circulars. Largely through our efforts a branch Experiment Station has been established in Door County and we have technically trained men in our county at all times during the growing season to give us information as to when to spray, what to use, and how best to apply spray materials; what fertilizers will give best results; how to prune, and to give us numerous suggestions as to the best program to follow to produce excellent fruit. They are continually carrying on experiments to secure new information. Our organization aids in disseminating this information. During the spraying season we secure a special weather report from Chicago through government service which we broadcast to our members. Notices are sent out telling our growers when to spray and what to use. All of these things are done to improve quality.

Briefly stated we suggest the following to our members:

1. Use nitrogen fertilizers, principally sulphate of ammonia, at three to five hundred pounds to the acre to increase size of cherries and apples; to promote leaf and wood growth; and to increase setting of fruit. Phosphate and potash have so far not produced any noticeable results. Manure of course should always be used, if available.

2. Trees should be pruned every year. Instructions are given through pruning demonstrations and through a bulletin published by the Experiment Station.

3. Clean culture is recommended from spring until about the middle of June when a cover crop of either annual or biennial sweet clover, or vetch, is recommended.

4. Spraying with Bordeaux mixture or lime-sulphur with arsenate of lead from two to four times on cherries and four to six times on apples, depending on weather conditions. It is essential to prevent such diseases as shot hole fungus, cherry or apple worms, scab or other diseases. These sprays must be timely or they are not effective. If cherry trees are not sprayed, the shot hole fungus will cause complete loss of leaves, and make bitter cherries, that no one will buy. Our experience further indicates that lime-sulphur will produce larger cherries than Bordeaux mixture. However, Bordeaux mixture lasts longer on the trees. To secure the same control with limesulphur an additional spray must be applied.

Picking Next Problem

After the grower has fertilized, pruned, cultivated and sprayed thoroughly he is ready to harvest his crop. When the industry first started local pickers harvested the crop. As the acreage increased the larger orchards installed pickers' camps of their own. For instance, the Martin Orchard Company which owns and operates 700 acres of fruit land has a camp of about 1,500 people, mostly girls and women, recruited from all sections of the state of Wisconsin. It has a miniature city of its own. They operate a cafeteria, a store, and supply sleeping quarters for all the pickers. They also have two camps of Indians quartered in tents and concrete barracks. These Indians cook their meals in the open on a large community stove used by all Indians in the camp. The Sturgeon Bay Fruit Company has about 400 boys in camp secured largely in Milwaukee. Others have girl camps exclusively. One grower had a group of Mexican beet workers. Trucks are run to nearby cities to gather all available help for it takes a large army of pickers to harvest a crop of 18 million pounds of cherries, such as we had in 1928. They must be harvested at the proper time to insure good quality.

(To be continued in July Issue)

Varieties and Culture of Iris

Papers by Members Milwaukee Horticultural Society and H. Whipple, Detroit

IRIS CULTURE

HARVEY WHIPPLE
Detroit, Michigan

THE garden varieties of iris thrive for me under "ordinary garden conditions." They will do best in well drained airy positions, and most surely in full sun. They demand at least what the gardener calls "half sun." Give them "clean dirt"—no manure, no damp mulches, no overhanging, smothering vegetation. The bloom season past they thrive on drought. Sand, gravel, ashes, Mortar rubble are useful in loosening a heavy soggy soil. Ground limestone helps to correct an unhealthy sour soil condition.

The thick root stalk, rhizome, from which the leaf fan grows should ride the dirt "like a duck on the water," never more than an inch below the surface with the rootlets spread out lower down for anchorage. When the earth finally settles it does no harm if the rhizome's upper surface is fully exposed to sun and air. The ground should be raised so that water draws away from the crown. In fall pull away—do not cut off—all dead leaves and burn. In resetting, cut back the leaf fans about six inches.

A light clean covering of leaves or straw (never manure) is good when the ground is frozen the first winter after replanting, to avoid upheaval of plants which have yet to get a good root hold. When growth starts in spring, clear this away and keep the ground clean. Established plants are better uncovered.

Remember—air, sun and good drainage.

Bone meal is a safe fertilizer, sprinkled on the ground surface around the plant and scratched in. SHALLOW cultivation only is necessary to avoid root disturbance. Keep out weeds. If very dry when plants are set, wet the ground about the roots and pull dry dirt over the surface.

For ten cents you may obtain from the Superintendent of

Documents, Government Printing Office, Washington, D. C. "Farmers" Bulletin No. 1406—Garden Irises by B. Y. Morrison—a recognized Iris authority. It is a pamphlet of forty-six, 6x9 pages discussing varieties, culture, diseases, pests.

NOTES ON GROWING IRIS

L. A. BURMEISTER
Milwaukee Society

Iris should be planted in a sunny location. The soil should be dry and well drained. Unlike the wild flag, the garden iris cannot stand water around the roots. It should not be planted deep. The bulb, or rhizome, should be just below the surface of the ground. The roots should be spread out and the soil packed around them. No fertilizer should touch the rhizomes. A very little well rotted manure may be applied to the surface of the ground. Bone meal and finely ground limestone are good fertilizers.

Iris soon form big clumps with masses of rhizomes and roots, which are likely to rot. It is hard to keep grass out of these clumps. For these reasons iris should be taken up, divided, freed from grass roots and reset once in four or five years. The best time to do this as well as to make new plantings is soon after the blooming season.

Plant in July and August

July and August are probably the best months for planting iris, but they may be planted any time during the year when not in bloom or when the ground is not frozen.

The sunny side of a shrubbery hedge is a good place for iris. Unlike the peony, it is not likely to suffer from being robbed of moisture and food by the larger plants. It is especially beautiful with lilacs or Spirea Van Houttei as a back ground. All these bloom at the same time. The colors of the lilac harmonize with those of the iris and the white of the Spirea brings out their beauty.

The iris is a good companion for the peony in a hedge which borders a walk or drive. At first the flowers may be alternated. Then, when the peonies have come to need all the space the border may be widened and the iris moved to the front. Clumps of iris are useful to give color in a herbaceous border. After the blooming season the ragged tops of the leaves may be trimmed off and the foliage of the surrounding plants will partially cover them. They will thus not be unsightly in the border.

For large grounds extensive plantings of iris will give wonderful effects. They may be planted in beds as borders of walks, drives or pools. Or beds may be arranged to form an iris garden which will be a joy for a month or more. In all plantings, large or small, the best results will be obtained by planting groups of one variety together. Groups being so arranged as to harmonize with each other.

SOME IRIS VARIETIES

MRS. LILLIAN KLINGBEIL
Milwaukee Horticulture Society

IN THE stately habits of the Iris, their gorgeous effects, their wonderful coloring and their freeness of bloom have well entitled them to the name of the "Orchid of the Hardy Garden," but Iris have the advantage of the orchids in delicacy of structure and in greater facility of culture.

The following are some of the best varieties:

Siberian Iris--are extra fine for cutting and massing and a few varieties should be in every garden. They can be cut when in bloom and will fully develop in water. Excellent for the border, for the reason that they come in bloom between the German and the Japanese Iris. The light green foliage is lax and graceful, making a nice appearance in the border, even when there are no blooms. The flowers are borne on very tall slender stems, ranging from 3 to 4 feet in height and are very free flowering. They are successful in any moist garden soil, but not in such positions as would be covered with water in the winter.

The best varieties, from my experience, are:

Perry's Blue—wonderful shade of Blue.
Emperor—very dark blue.
Snow Queen—pure white.
Blue King—intense brilliant blue.
Kingfisher Blue—one of the finest and taller than Perry's Blue.

The *German Iris* is a magnificent hardy perennial and a favorite flower. It requires practically no care and grows in any kind of soil, multiplies very rapidly. They withstand extreme heat and cold and are the best drought resisters amongst the perennials, in fact they grow where other plants will not thrive. For the beginner, I would suggest the common or inexpensive varieties.

Arrangement depends upon individual taste. Wonderful effects may be obtained by planting groups of Iris along walks, drives, shrub borders, near a pool and in rock gardens. Try to keep light and dark shades in sections by themselves. White, yellow and pink go well together. Red, purple, lavender and blue is another good conbination. Some of the best *Standard varieties* are:

Florentina Alba—white.
Kochii—deep blue.
Firmament—dark blue.

These three are called great because of such high qualities so early in the season and usually bloom for Memorial Day.

Aurea—rich chrome yellow.
Caprice—S. rose red—F. deep red.
Isolene—silvery lilac mauve with orange beard.
Iris King—S. coppery yellow; F. crimson bordered yellow.
Junita—dark blue, very large, tall and fragrant.
Lohengrin—soft shade of Cattleya rose—large orchid like flower.
Monsignor—S. satiny violet; F. purple crimson.
Pallida Dalmatica—lavender blue.
Rose Unique—almost red—early flower.

Some of the *Choicier varieties* are:

Ann Page—lovely pale lavender blue.
Ambassadeur—S. reddish violet; F. deep brown.
Chasseurs—finest yellow.
Dominion—S. light blueish violet; F. of exceptional substance at the base deep rich indigo; purple velvet.
Aurora—pink; the very finest in Pinks.
Kashmir—white; tall pure white.
Lent A Williamson—S. violet; F. rich royal purple; much like the Alzarar.
Mother of Pearl—pale bluish lavender; grows 48 inches tall.
Princess Beatrice—S. violet blue; F. deep purple.
Susan Bliss—pink—mid season.
Shekinah—pale lemon yellow.
Sour de Mme Gaudichau—clear lavender blue shading to silvery blue.

The next group is the *Spanish Bulbous Iris*—They are of difficult culture in garden, except in Southern California. They are slender plants with narrow leaves and flower stalks about 18 inches high, bearing at the most two flowers. They do not thrive in any climate where the autumn growth is likely to be injured by frost. They are grown most around here, in greenhouses. They bloom well the first year, give a scattering bloom the second year and perhaps a few the third year although the length of time it takes them to disappear in this way, varies. They are small and not worth the trouble necessary to keep them in good health. Among the *best growers* are:

Regelia Korolkowi; Oncocyclus susiana; Juno persica and Juno alta Reticulata Bakercana.

VARIETIES OF IRIS

H. GUTKNECHT
Milwaukee

Dutch Iris (Iris Xiphium Hybridium)

Bloom about 2 weeks before the Spanish, from which they were developed. They are stronger growers with larger flowers. Some varieties are: White Excelsior, pure white; Hart Nibrig, clear blue; Rembrandt, dark blue; Arie Scheffer, very dark blue; Cornelius Troost, pale yellow; J. W. DeWilde, deep yellow. These are but a few of many beautiful varieties.

Spanish Iris (Iris Xiphium)

Coming into flower in June, after the "Dutch"; grow from 1 to 2 feet tall. Queen Wilhelmena extra early and British Queen are pure whites. Excelsior, light blue late; King of blues, dark blue; Chrysalora, pale yellow; Cajanus, deep yellow; Thunderbolt, dark bronze; Bronze Queen, terra cotta. Many other good varieties may be had. Golden Lyon, rich yellow frilled sort; is new, but not introduced here yet.

English Iris (Iris Xiphioides)

These are still later than the Spanish, but claimed to be the most satisfactory for the beginner. Some good named sorts are Merde Glace, white; Tantalus, light blue, shaded darker; Prin-

(Continued on page 315)

History and Culture of the Dahlia

E. C. HAASCH
Milwaukee Horticultural Society

THE Dahlia was first discovered in Mexico in 1615 growing in the wilderness of the Sierras in myriads of many colors and all with open centers.

The Spanish botanists, Cervantes and Cavairilles were the first to appreciate the greatness of this flower. Seeds of the Dahlia were received at the Royal Gardens at Madrid in 1789 by Abbe Cavairilles. The first of these seed flowered in 1790 producing semi-double flowers which were named after Dr. Andrew Dahl, a Swedish botanist, thus giving the dahlia its name as we have it today.

Previous to 1814 we have no record of there being a double dahlia, the first to be produced by the Botanic Gardens of Brussels, Belgium. Many countries in Europe had made attempts to grow this flower, but were without success. The Dahlia in its wild state grew in high elevations and in low temperatures, and when this information was conveyed to European growers they made noticeable advancement.

As early as 1814 there were about twelve distinct varieties and for the next twenty years, but few more varieties had been added.

The first cactus variety was introduced in 1864 in Mexico and sent to England and named Jouerzi in honor of President Jonerez of Mexico. It was exhibited in London in 1880 and was the means of many new Dahlias being introduced, being the parent flower of many varieties existing today.

The first success with the Dahlia in our own country was about 1832, when they were exhibited at the Pennsylvania Horticultural Exhibition, the roots having been imported from Europe.

In the following twenty years the possibilities of the Dahlia had exceeded all expectations

This comprehensive paper on Dahlias was presented by Mr. Haasch before the Milwaukee Horticultural Society. It represents the type of program put on by the Milwaukee club members each month and is the reason for the fine attendance and interest of the members in the meeting.

and the Dahlia as we know it today would cause the botanist of previous days to stand in amazement.

More than 8,000 varieties have been introduced and named up to this time. Each year new introductions appear and older ones are dispensed with. The older varieties in order to be retained must possess unusual merit.

The Selection

The most important thing in growing Dahlias successfully is to select stock from a reliable grower to obtain healthy stock free from stunt and disease. The best stock is always cheaper at a higher price than inferior stock at a low price.

The personal likes and dislikes of the buyer must be considered, but much assistance can be given if you state the type, color, etc. Often the grower can make the best selection, knowing the habits and form of the various varieties better than the buyer.

The Location

Select an open sunny location in which to plant your Dahlias out of reach of trees. Dahlias will not grow well if planted near a wall or solid board fence. They require plenty of fresh air and sunshine. It is very necessary that the tubers have good drainage as they will not thrive with wet feet. Where the soil is heavy, sufficient drainage can be obtained by placing sand beneath the plant at the time of planting.

Preparation

The soil is very important and if the ground for planting is selected in the fall and decomposed manure spaded under at that time, the first task is well begun. In the spring keep the soil well cultivated until time of planting and do not permit weeds to grow. The kind of soil is not nearly so important as the condition. At time of planting spade the soil well to a depth of twelve to fourteen inches and if the soil is not sufficiently moist it should be wet in advance of planting time.

The Planting

The time for planting in this vicinity is from May 15th to June 15th although many Dahlias planted as late as July have bloomed very successfully. In most instances this late planting is not advisable as the danger of frost is great. The rows should be four feet apart and the plants three feet apart in the rows. The upper part of the tuber should be four inches below the surface. Lay the tuber flat with the eyes or sprouts up. Never stand the tuber on end.

It takes two to three weeks for the plant to come through the ground, and they should not be disturbed.

Fertilizing

Autumn is a good time to apply manure on the surface and better results are obtained if turned under, but if this has not already been accomplished, work it in with the hoe when plants are well above the ground. When the plants are beginning to bud, apply a good concentrated fertilizer containing phosphoric acid and potash. Avoid rich nitrogenous fertilizer as they make an over-abundance of foliage at the expense of flowers and roots and the tubers are poor keepers. They shrivel very quickly and are always soft and inferior. An application of bone meal worked in between the rows when the flowers are beginning to bloom is of much assistance to the flowers and roots.

The Cultivation

Do not cultivate when the soil is wet. Hoe carefully to prevent a crust forming. The deeper the soil can be worked the longer it will hold the moisture. Much care must be exercised when cultivating before the plants can be seen, as they are easily broken.

Disbudding

To get the best blooms it is necessary to disbud, otherwise they will become bushy and harden up, giving only inferior flowers. By following the instructions (the process is very simple) you will have pleasing results. First permit only one shoot to remain (never more than two) selecting the best one, removing all others. Pinch out the top when the second set of leaves appear, thus making the plant branch out and support itself on all sides. When the lateral shoots or flower branches develop flower buds, at every pair of leaves on the branch a new set of shoots appear. When they develop enough to remove with the fingers, remove all except the last one at the base of the branch and when cutting the flower cut down to the remaining shoot. It will then also develop a long flower stem and put forth a flower. In the late autumn cease this operation and let the plant grow, as this helps to mature the roots.

Watering

This is not necessary until the plant is starting to develop. When watering give the plant a good soaking in the morning and evening. Once or twice each week is all that is necessary. When artificial watering cannot be resorted to, mulching will suffice, but when this is done it stops cultivating so must not be applied until August.

Insect Pests

Dahlias must be kept growing. If you notice them apparently standing still, not making any growth, examine the leaves and see if they have been attacked by aphis thrip or the white fly. These pests are particularly prevalent during hot dry weather and are so small as to be almost invisible. Spraying the plants with a hose will eliminate them to a slight extent, but we have found dusting plants with nicotine dust, called Axfixo, is the best possible remedy. You apply this dust under the leaves during the middle of the day if possible, and the action of the sun on the dust causes a gas to form which asphyxiates the pests. It may take several applications of this dust to entirely clear your plants, but it is well worth it. Axfixo is manufactured by the Hightown Hardware Co., Hightown, N. J., and may be purchased from them direct, or from any seed house.

Cutting the Flowers

This should be done in the morning and the stems placed in water at once. Cut long stems even if you do not want them, as this will keep the plant down and develop long stems on the following flowers. Do not let the flowers fade on the bush. The more you cut the better will be the next blooms.

Digging and Storing the Roots

Lift the roots when frost has destroyed the plants, exercising great care so as not to break the necks of the tubers. The clumps should be stored upside down in a cool frost proof cellar, carefully covered with dry sand, peat or something that will prevent them from drying out.

Dividing the Tubers

Separate the tubers when they begin to sprout in the early spring, *leaving a crown* on each tuber as there are no eyes elsewhere on the tuber. A small tuber with a good crown will make as strong a plant as a larger tuber.

CRANBERRY GROWERS WILL MEET IN AUGUST

WISCONSIN cranberry growers will hold their annual meeting near Nekoosa, Wis., Aug. 1, according to Clare S. Smith, secretary of the State Cranberry Growers' association. He says that as a producer of cranberries Wisconsin is exceeded only by Massachusetts and New Jersey. Its 1923 production was estimated at 45,000 barrels.

The cranberry industry in Wisconsin utilizes land that is of little or no value for other purposes. The growers have been unusually successful in solving their marketing problems. Fully 70 per cent of the cranberry production of the country is sold through the American Cranberry exchange, a co-operative organization, according to Mr. Smith.—Milwaukee Journal.

HORTICULTURAL NEWS FROM NORTH DAKOTA

SECRETARY A. F. YEAGER

Several have asked the address of Johnson and Johnson who make the adhesive tape for grafting purposes. It is New Brunswick, N. J. However, for top grafting, out-of-doors, all you need is a sharp knife, some common cord to tie the grafts in place, and some melted paraffin to cover them. If you want to do some top grafting get Farmers Bulletin No. 157. We note plum grafts made last spring showing fruit buds this year.

The following is briefly the method used in treating trees having a cavity. First dig and scrape out all the dead wood down to sound tissues; then paint all the exposed surface with creosote. If the tree requires it, brace with bolts, then fill the cavity with concrete, or better yet, asphalt, letting the filling extend out only as far as the inner edge of the bark. If it extends farther the wound will not heal well.

The U. S. D. A. recently secured an appropriation of $20,000 for potato work. They propose to use it in cooperation with the State Experiment stations in producing a new variety of potato. Things which will be striven for in potato breeding work are, a better colored potato; one free from hollow heart; smooth, shallow-eyed, early, heavy-yielding, and if possible, frost resistant.

"Roadside Marketing in Michigan" is the title of Special Bulletin No. 185 of Michigan State College, East Lansing, Michigan. This form of selling surplus horticultural products might be used to good advantage by some of our people in North Dakota.

Some nurseries have been sending out plum trees that were three or more years old. Trees of this size seldom thrive.

If your gooseberry and currant bushes are not bearing as well as they used to, I suggest a good thinning out. Take out at least half the canes, leaving the young, vigorous sprouts for the most part. This will result in more fruit and better fruit.

The "moon" question is up once more. We pay no attention to the condition of the moon when we are ready to plant the garden. We have had workmen predict disaster to part of our crop several times in the last ten years because the moon had changed during the midst of the planting season. Harvest time did not show the predicted results.

The following are vegetable varieties recommended by the Massachusetts Experiment Station. We mention in each case only the varieties given first place: Mary Washington asparagus; Bountiful and Burpee's Stringless Green Pod green beans; Sure Crop Wax and Pencil Pod Kidney Wax yellow beans; Crosby's Egyptian, also called Early Wonder, early beet; Detroit Dark Red late beet; Golden Acre and Copenhagen Market early cabbage; Penn State Ball Head late cabbage; Chantenay carrot; Snowball cauliflower; Golden Plume celery; Early Surprise white sweet corn; Golden Sunshine early yellow corn; Davis' Perfect cucumber; Black Seed Tennis Ball and Unrivaled head lettuce; Gradus, Blue Bantam, Lincoln, and either Alderman or Telephone peas cover the season; Harris' Earliest pepper; Scarlet Globe radish; Bonny Best tomato. Are you growing the best?

The Orange Judd Publishing Company announce a new book, "Starting Early Vegetable and Flowering Plants Under Glass," by C. H. Nissley, of New Jersey. It is considered the most up-to-date book of its kind.

If you have trouble with hollow potatoes it is suggested that you plant the pieces closer together this year. That will reduce the size of the potatoes but tend to eliminate the hollow ones.

Replies to a letter sent to all Experiment Stations of the United States indicate that the new seed treatments such as Semesan and Dip Dust have not, thus far, shown themselves to be as good as the old-fashioned treating methods under most conditions. These treatments will not control scab or scurf as well as either hot formaldehyde or corrosive sublimate. Some seem to think there is a slight hastening of germination from such treatments, but others do not find this true.

In a recent bulletin the West Virginia Experiment Station reports that Rome Beauty apple in six years produced a total growth of 1459 ft. with a one-foot trunk, 833 ft. with a two-foot trunk, 626 ft. with a five-foot trunk. This confirms what we have advocated many years, that our people should grow short trunk trees, the shorter the better.

Massachusetts Truck Station says that one ton of poultry manure to which is added 90 lbs. superphosphate and 35 lbs. muriate of potash is equal to 400 lbs. of a standard mixed 6-8-6 commercial fertilizer.

If you have trouble with root maggots on such crops as radishes, plant the radishes this year as far as possible from the place where they were planted last year. Also when the crop is mature pull up and destroy the old plants at once. They simply make breeding places for more maggots.

The Apple Maggot

R. H. PETTIT
Michigan Agricultural College

THE apple-maggot is a footless, white maggot which, like most other maggots, has no distinct head. It attains a length of slightly more than a quarter of an inch, and tunnels in apples, preferring sweet and semi-acid fruit to the earlier varieties, although winter apples are not by any means immune. This pest is also occasionally found in plums and cherries, being common in wild crab, and is believed to have originally lived in haws. A somewhat smaller race inhabits blueberries in the East.

During the colder part of the year this insect rests underground in the pupal stage, producing rather pretty two-winged flies about the first of July. These flies are somewhat smaller than the common housefly. The flies feed for a short period on the surfaces of apple leaves and fruits where, without puncturing the skin, they gather a little food from the surface by scraping and scrubbing the skin with their mouth-parts.

After about a week or ten days, each female fly lays her eggs in the fruit, usually apples, being attracted most strongly to the fall and early varieties having thin skins, since these varieties are at that time larger than the standard winter sorts. Each egg is placed in a tiny slit cut into the flesh through the skin so that the maggot, when it once hatches out, is already inside of the apple and therefore completely protected from any spray which might be applied. The maggot tunnels through the flesh seemingly without any choice as to the part of the fruit utilized, finally coming to the surface when full grown.

When the surface is reached, the maggot often continues to advance until part of its body protrudes from the fruit, and if the apple falls to the ground at that time, the maggot immediately leaves the fruit and buries itself. If, however, the apple remains hanging to the tree for a time, the maggot often becomes settled in place and is fastened in by the drying juice of the fruit so that when the apple finally does fall it may take several days for the dried juice to become sufficiently soft to enable the maggot to leave and bury itself. In almost no case, however, does the maggot leave the fruit until after the latter has fallen from the tree. Because of this habit, the immediate destruction of all fruit as soon as it falls would dispose of practically all of the maggots on the tree and effectively control the pest, if it were not for outside reservoirs of infestation supplied by wild crabs, haws, and other fruit of that nature. The greater proportion of the larvae that enter the ground as described remain there until the following spring, when they emerge as flies, thus completing the life cycle. A small proportion, however, emerge in the late fall, thus producing an unimportant second generation.

This article on the apple maggot is taken from Bulletin No. 79 of the Michigan Agricultural College by special permission of the Director.

This maggot, often called "Railroad Worm", is becoming quite serious in Wisconsin. At the request of a delegation of apple growers from Lake Mills recently, Assemblyman Goff introduced a bill appropriating funds to study control measures for the worm in Wisconsin.

For a more complete discussion of the habits of this insect, together with illustrations of the effect of its work on fruits, see Michigan Experiment Station Circular Bulletin No. 87. As is well known, many of our native pests are kept within due bounds most of the time through the agency of natural enemies and natural forces inimical to the welfare of the pest. It is also well known that almost any insect from which restraining influences are removed, perhaps through the failure of parasites, may suddenly multiply to an enormous extent, or in other words become epidemic and remain so for an indefinite period until its natural enemies once more restore the natural balance.

During the early part of the present century, the apple maggot was making itself felt quite generally and was the cause of the loss of much fruit in Michigan. However, its natural enemies, aided by efforts exerted by man, reduced its number and have kept it in subjection for so long a time that depredations have been practically forgotten by the present generation of growers. The practice of keeping in the orchard animals which feed on the freshly fallen apples has been largely discontinued. Orchards have increased in size, and we have come to depend on spraying to the exclusion of most other methods of control for all sorts of pests. During the last two or three years, Michigan apple growers have suffered considerable losses in certain localities, through the depredations of the apple-maggot. Other states are beginning to notice similar epidemics within their own borders, and the insect is now on the increase rather than the reverse.

In view of our present information, the best that one can do is to prosecute a vigorous campaign, using our two best weapons of defense. First is the removal and destruction of fallen fruit immediately after it reaches the ground, either by the feeding of live-stock or by

(Continued on page 311)

Results with Fertilizers on Strawberries and Raspberries

ROY E. MARSHALL
University of Minnesota

MUCH less is known about the fertilizer requirements of strawberries and the brambles than is the case with our tree fruits. This is partly because the fertilizer requirements of small fruits have received much less attention than have those of tree fruits, and partly because tests conducted with small fruits have produced results that are somewhat more confusing. I do not mean to infer that the small fruits do not respond to commercial fertilizers but I do feel safe in stating that there are fewer small fruit plantations that will give clear cut increases in yields when commercial fertilizers are applied than is the case with tree fruits.

Until more is known about the nutritive requirements of the several kinds of small fruits, I am inclined to recommend liberal applications of barnyard manure if it can be obtained without too great expense. In the small fruit district of Michigan, manure is not available. Consequently, we have been much concerned regarding the nutritive requirements of these crops and the results I am about to discuss are to be regarded as more or less preliminary ones based upon a number of studies made by members of the horticultural department staff at Michigan State College.

Strawberries

Of the three elements, nitrogen, phosphorous and potassium, nitrogen was found to be the chief limiting one although somewhat greater growth of strawberry plants and production of berries resulted from combinations of nitrogen and phosphorous. Potassium has produced no beneficial results in any test that I know of.

Very little is known of the fertilizer requirements of small fruits. This article given us by permission of Mr. R. S. Mackintosh, secretary of the Minnesota State Horticultural Society, is one of the best articles on this subject which has come to our attention for some time.

In our work we have been particularly interested in trying to find out when these fertilizers should be applied, and what factors are responsible for high and low yields in the strawberry. Consequently, Professor R. E. Loree, under whose supervision this phase of the work was done, has used very light soil in these studies. Results from portions of this work will give some conception of the nutritive requirements of this plant.

Fertilizers were applied to some plants in the spring shortly after the new plants were set or about the time that growth normally starts; a second lot of plants were fertilized in late July or in early August; a third lot in both spring and summer of the pre-crop year; and a fourth group was fertilized only in the early spring of the crop year. There were also a few combinations with respect to time of application and in some cases only phosphorous was applied; in others only nitrogen, and in still others both nitrogen and phosphorous.

Number of Runners Per Plant

Unless otherwise mentioned, it is assumed that these fertilizer applications were made during the season in which the plants were set in the field; or in other words, the year before we expect the first crop from the plantation. Applications of nitrogenous fertilizers in the spring generally resulted in considerable increase in amount of runners formed, and these were usually formed throughout the summer, while unfertilized plants produced about 75 per cent of their runners during June. The greatest amount of runner production resulted when half of the fertilizer was applied in the spring and half in the summer, these plants producing nearly twice as many runners as unfertilized plants. Summer fertilization also seemed to favor greater crown development but there is no indication from these experiments that great crown development is necessary or even desirable.

Number of Flower Clusters per Plant. Applications of nitrogen increase the number of flower clusters per plant but of particular interest is the number of clusters resulting from applications from plants fertilized in both spring and summer of the pre-crop year and again in the spring made at the two different seasons. The summer fertilized plants produced about 2¼ times as many clusters to the plant as the spring fertilized ones, and those receiving half of the application in the spring and half in summer, produced nearly three times as many

(Continued on page 315)

Operating a Spray Ring

LLOYD SCHMIDT
Racine

Lloyd Schmidt entered the Racine County School of Agriculture as a winter student in November, 1926. He became especially interested in horticulture, probably due to the fact that they had an orchard of about 90 trees on their home farm which was being neglected and which was not bringing in any returns. His father also became interested and with a little work we succeeded in organizing what is now known as the Thrifty-Five Spray Ring and put Lloyd in as operator. He did his work carefully and those for whom he sprayed were well pleased. The results obtained can perhaps best be expressed in the words of one of the members when he said, "We neved had any idea that these old trees could be made to produce in this way."

Lloyd's father made the statement that if Lloyd had learned nothing in the school except to spray his time would have been well spent.

Lloyd has now operated the ring for two seasons. It might be of interest to you to know that his first season's work was done so well that his ring took first prize at the County Fair, based on quality and quantity of fruit shown in proportion to members in the spray ring exhibiting.

Hugo Klumb, Racine County School of Agriculture.

LAST winter while I was attending the Racine County School of Agriculture and Domestic Economy I became very much interested in the proper care of an orchard. We studied the different parts of the flower and how the seed was formed. I had always believed that when a seed from any fruit or plant was planted it would produce the same kind of fruit or plant. I thought that a seed from a Wealthy apple would produce a Wealthy apple; but I found out it does not. We studied further and were taught how to lay out an orchard and how to plant trees. Then we learned how to take care of small trees by pruning them, working the soil and a few other things. After that we were taught how to prune and graft large trees.

One day Mr. Klumb and Mr. Kuehner, the State Fruit Specialist, took our class to a pruning demonstration given at a neighbor's orchard. The first thing Mr. Kuehner did was to show us how to prune and use our tools. After we had pruned a few large apple trees we pruned some cherry trees.

Lloyd Schmidt

This demonstration was given about two weeks before school was out. The last week of school we were taught how to graft. Immediately after school was out I bought a pair of pruning shears and a pruning saw and began to work on our trees. After I had pruned a few trees Mr. Klumb came out and looked them over. Then he said, "You have done a fine job."

I began to think, "What is the use of pruning if I don't spray?" I asked my dad about spraying and he said, "I'll let you have the orchard this year and I'll buy a share in the sprayer." I spoke to Mr. Klumb about this and he said I should call the most interested neighbors together and talk it over. I called a meeting but only a few were present and most of them thought it would be too expensive. The next day my father said, "We'll buy a hand outfit and spray our own trees.

We inquired around the neighborhood and found where we could buy a hand outfit. A few days later we ordered the spray materials. When weather conditions were suitable for the dormant spray we started but soon found that the pump we had secured was not working right. In the afternoon I called Mr. Klumb and when he came and examined the pump we found that it was no longer fit to use.

The next day we called together some of the neighbors who were still interested in spraying and made another attempt to form a spray ring. This time we were successful, forming a ring of five members and purchased a Bean Baby Simplicity power sprayer. This machine was ordered the same day because we wanted it in time to put on a dormant spray. It took about two weeks for it to come and so arrived too late for the dormant spray but early enough for the pre-pink spray.

A few days after the machine came Mr. Klumb called and started it for me. Then he showed me how to spray properly and how to take care of the sprayer. The next day I started to spray. By noon I had finished one orchard. It took me about three days to put the first spray on the five orchards.

A week later I started to put on the pink spray but rainy weather interferred and I had

to go to one place three times before I was able to complete the job. It took me about the same number of hours for the pink spray as it did for the pre-pink one. These are applied a little differently. When I put on the dormant spray I followed the large branches and the trunks but when applying the pink spray I worked across the branches and did not spray the trunks.

Orchard Inspection Tour in Racine County. Examining Results of Spraying.

After about three-fourths of the petals had fallen it was time for the calyx spray. Never spray when the trees are in full bloom. Everything went well when I put on this spray until I came to the last orchard. Then I had trouble with the engine. I tried to fix it but I could not find the trouble so Mr. Klumb came out in the afternoon and helped me.

Fourteen days later I began to spray for the fourth time. We call this the ten-twenty days after the calyx spray. At this time I had more trouble with the engine but soon found the cause and removed it. This spray took about two and one-half days. When I finished with it I washed and oiled the sprayer and stored it in Mr. Cobb's shed.

Mr. Klumb and Mr. Kuehner came to see me about two weeks later and looked at the apples. They didn't find any wormy ones but they found some scab and also showed me a few diseases of other apple trees. They said about seventy-five per cent of the apples were free from scab. Soon after this the weather became warm and dry. The trees which were not sprayed became very brown. Many people would ask us why our trees looked so nice and green and some of them would say their trees were brown. When I asked them if they ever sprayed some would say they did while others said no. Some said, "We spray only two or three times or as often as we have time."

On the first day of August I began to put on the August spray. This time it took me two days. The first day Mr. Klumb and Mr. Kuehner watched me. This was the first time Mr. Kuehner saw me spray. Only the trees bearing late varieties of apples received this spray. The early varieties which were almost ready to harvest did not receive it nor did the trees bearing no fruit.

A week later I went to a large market in Milwaukee with dad and there I saw some home grown apples. I asked the man the price and he said, "Two dollars per bushel." Before I went home that day I bought some apple baskets. My father asked me what I was going to do with them and I told him I was going to sell some of the early apples as they were selling at a high price. When I got home I began picking and it took me one hour and twenty minutes to pick five bushels of apples. I said, "This is different than last year when it took me an hour to pick a bushel of good apples."

The next day we took the apples to the market and received two dollars per bushel. Many people noticed our orchard and would say we were the first they had seen this year who had apples and they would ask if we sprayed and we, of course, said yes. Some people would say, "We sprayed too but we haven't apples like yours." I asked some of them how many times they sprayed. Some would say once, others twice, and so on. I told them that wasn't enough and that it takes five sprays to grow good apples.

It wasn't long before the time came to get the apples ready for the fair. Before we began to select these apples we took a tour through some of the orchards I had sprayed and also some sprayed by others. This was on September seventh, during silo filling time, so there were not many present. We visited three orchards that I sprayed and then went to the East Wind Lake Spray Ring.

The next evening Mr. Klumb and Mr. Kuehner gave a grading and marketing demonstration on apples and showed us how to select apples for the fair. I took some of my unknown varieties of apples to the demonstration and had most of them identified.

Soon it was time to get my apples ready for the fair. I started early on a Monday morning and worked all day but did not finish. The next morning I continued and finished the task at nine o'clock. I

(Continued on page 314)

How to Use Annuals

JAMES G. MOORE
College of Agriculture, University of Wisconsin

PERHAPS before I make suggestions about how to use annuals I should answer the question, "Why Use Annuals?"

There are two principal complaints made against this class of plants, "They require too much work" and "They do not come into flower early enough". The first statement is usually based upon the supposition that herbaceous perennials are much less work than annuals. This belief is largely incorrect. A large number of our perennials have to be replanted or at least thinned out frequently if they are to give satisfactory results. Perennial clumps are continually becoming infested with grass and weeds which are very difficult to remove. Some perennials as Achilles, giant daisy, primrose, and a number of others, are veritable weeds and will take the entire border or garden in a comparatively short time unless a great deal of hard labor is performed to keep them within bounds. The clean-up of herbaceous perennials alone entails more work than the planting of annuals, which require little labor in the clean-up.

Lateness of flowering may be a valid objection to annuals. When, however, they can be used to give beauty to a spot left barren or unsightly by the dying down of early blooming perennials or bulbs, they fill efficiently a need not easily provided for by other means.

Owing to the fact, then, that annuals are no more work than the average run of herbaceous perennials and that they furnish a source from which we can obtain a wealth of floral material, not surpassed in beauty or usefulness in the improvement of home grounds or the decoration of the interior of our residences, one can hardly afford to overlook annuals in the home grounds plantings.

Border Planting

Shrub and flower plantings can be designated as borders, beds and gardens. The border plantings at the base of the building is the most important planting in home grounds improvement. It is often spoken of as foundation planting or the house border. Its purpose is to make the house appear as a natural part of the landscape.

House borders are best composed of shrubs and flowers in combination. Occasionally trees, particularly dwarf evergreens, are used in foundation planting. House borders composed entirely of flowers are not satisfactory because under Wisconsin conditions there will be no house border during the winter and early spring months. The flowers used in the house border may all be perennials, but annuals used to supplement the shrubs and perennials are quite in place and in most cases will improve the character and attractiveness of the house border. This is particularly true when bulbs have been used for early effects. In order to have the bulbs produce good flowers it is necessary to let the foliage remain for some time after the flowers are gone. But this delay need not worry one who uses annuals. He merely sows his seed or sets his small plants among his bulbs and when the time comes to remove the foliage of the bulbs, behold! his annuals are well on their way to the production of a blaze of color which will give much enjoyment during the late summer and early fall months. When self seeding annuals are used, it is not even necessary to sow seeds or set plants. When the tops of the bulbs are finally removed, just thin out the volunteer plants to the desired distance and later on you will be rewarded for the confidence you placed in annuals.

The second most important borders in landscape planting are those along the boundaries of the grounds. In planting city home grounds, in which the lawn area is relatively small, it is a good plan not to let these borders extend in front of the house unless there is a fence or other distinct division between adjoining lots, or when there is some objectionable feature which needs screening. Leaving this part of the boundaries unplanted is advisable so as to increase the apparent extent of your own grounds by making use of those belonging to your neighbor. If the house border is well planted a front lawn border is not necessary. On large places or in the case of farm home grounds where some line of demarcation between fields and grounds other than fences is desirable, the lawn border may extend even to the front boundary. A border may be thrown across the lawn at or near the rear of the house to screen off the drying yard or other objectionable feature or to separate the lawn from the vegetable garden.

Any of these border plantings offer excellent opportunities for the use of annuals. While in most cases they should be grown in clumps in front of shrubs or tall growing perennials, some of the taller annuals as cosmos or African Marigolds may be used alone to form borders where the area for planting is narrow. In some cases vines supported on fences make very satisfactory border plantings. Sweet peas, morning glories, Cardinal climber, and scarlet runner bean can be used very satisfactorily in this way. When

given a trellis support they may also be successfully used as screens.

In using annuals in border plantings, the various kinds should be planted in sufficiently large masses as to make a definite point of interest. The number of plants of a kind necessary depends upon the size which they attain and the size of the grounds. Three or four plants of cosmos or African Marigold might be enough on a small grounds while several times that number would not be too many on large grounds or if smaller plants like snapdragon or stocks were used.

It is highly desirable to arrange the plants and flowers in borders so that the lower growing ones are at the front. Occasionally tall growing annuals or perennials may be used at the front of a border when it is desirable to divide the bed or to have a planting intervene between two clumps having clashing flower colors.

Flowers are used at times to form borders along the sides of walks. It is not desirable to have a walk bordered on both sides with flowers, except those in a garden. It is particularly bad to use flowers in this way along a walk leading from the street, highway or main drive to the house. If a walk runs close to a building or a fence then planting the area in such a way that the flowers border the walk is not objectionable. Even under such conditions it is desirable to have a strip of lawn between the walk and the border.

Flower Beds

Flower beds should not be located in the lawn area. Use flowers? By all means, but use them as adjuncts to border plantings or in flower gardens. Quite as objectionable as the glowing flower bed in the lawn area are flowers growing in sewer tile, half barrels, kegs, old boats or tubs set in the lawn area. This is not good landscape art. It spoils the unity of the landscape picture. It is not even a good way to grow flowers. The only good reason for using this method would seem to be to protect the plants from the attacks of barn yard fowls.

Porch and window boxes have become popular receptacles in which to grow annuals. Used in this way they practically supplement the house border. It is a very satisfactory method of using some annuals. One of the precautions to be observed in the use of porch and window boxes is to use only a few different kinds of plants in the same box. The rule of having enough of one kind to really make a showing is as important in porch box planting as in border planting.

One seems almost justified in saying that we are color crazy these days. There seems to be a fad for nothing but the most glowing colors and to make the matter still worse every kind and color is mixed together in a composition, either a bouquet or planting, without any regard for fitness or color harmony.

Bright colored flowers have their place and when properly used, may contribute greatly to a landscape picture. A variety of kinds may also be in keeping providing the number is kept at a point where there are enough of one kind to dominate the picture at a given time. But throwing a few specimens of many kinds and a variety of colors together in a single composition can scarcely be said to give desirable effects or to be good art.

A person who plants a lawn or garden makes a picture just as much as the artist who wields a brush and uses pigments. Our picture is good or bad in proportion as we exercise good taste and skill in producing it. An artist who uses a variety of colors and forms indiscriminately, rarely produces a pleasing picture. No more can a gardener use his flower colors and forms indiscriminately and produce a good landscape effect.

"Curb thy desire for riots of color and multiplicity of kinds that thou mayest behold a meritorious planting" is the eleventh commandment for the person who uses annuals in planting his grounds.

STATE POTATO GROWERS UNITE

ORGANIZATION of a Wisconsin unit of the National Potato institute was effected by 200 representatives from 20 counties who met at a state potato conference at Stevens Point May 14.

James Vint, state commissioner of markets, and James G. Milward, secretary of the Wisconsin Potato Growers' Association, were named chairman and secretary of the Wisconsin unit.

The group adopted by-laws, a financial plan for the support of the Wisconsin division and resolutions aimed to stabilize the potato industry. Eleven directors were chosen. They are: John F. Jardine, Waupaca; Amos Radcliffe, Eagle River; A. J. Larson, Waupaca; C. H. Becker, Almens; Jens Urhenholdt, Hayward; Peter Krier, Antigo; James Prosser, Antigo; James Isherwood, Plover; Tom Meredith, Harshaw; Joseph Okray, Stevens Point and Robert Crossett, Waupaca.

A resolution passed by the conference asks that a state system of potato grading be instituted and that it be rigidly adhered to by growers, marketing agencies and retailers. An increase of duty on potatoes and potato starches, an inspection of potatoes on the retail markets, branding or tagging of potatoes according to grade were also urged.

W. A. Duffy, state commissioner of agriculture, attended the meeting.

Wisconsin Horticulture

Published Monthly by the

Wisconsin State Horticultural Society

119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S. H. S., Madison, Wis.
Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

OUR COVER PICTURE

Our cover picture this month was donated by an enthusiastic gardener and photographer, Mr. J. A. Hood of Racine.

We had the pleasure of visiting Mr. Hood's garden early in May. He has a rock garden of unusual design, made with the view of taking group photographs. A number of people may sit or stand on large rocks suspended over a pool into which two streams of water flow. Shrubs, trees and flowers in the back-ground form a pleasing setting.

STATE FRUIT GROWERS CONVENTION

Sturgeon Bay, Wis., July 12-13, 1929

PROGRAM

FRIDAY, JULY 12

10 A.M.

Assembly and Registration at Court House
Inspection of Canning Factory and Plants of Door County Fruit Growers Union and Reynolds' Preserving Company
Noon Lunch on Bay Shore
Short Program

1:30 P.M.

Orchard Tour
Demonstration and Discussion by Growers on Cultural Methods for Apples and Cherries

6 P.M.

Out-door Supper at Resort, Short Program

SATURDAY, JULY 13

8:30 A.M.

Assemble at Court House. Tour and Inspection of Experimental Work being conducted in Door County as follows:
Cherry Pruning and Pollination
Cherry Fertilizers and Moisture Relations
Apple Pruning for Regularity of Bearing
Apple Thinning
By Prof. R. H. Roberts, Horticultural Dept.
Cherry Aphids and Case Bearer Control
Apple Leaf Roller Investigations
By A. A. Granovsky, Entomology Dept.
Apple Scab and Cherry Leaf Spot Control Investigations
By Dr. G. W. Keitt and D. H. Palmiter, Dept. of Plant Pathology
Noon
Lunch on Bay Shore, Short Program
2 P.M.
Scenic Trip Through Door County Orchards

DUNN COUNTY FRUIT GROWERS AND STATE HORTICULTURAL SOCIETY

Small Fruit Day Meeting and Field Tour
Menomonie, Wisconsin
Friday, June 14, 1929

PROGRAM

10 A.M.

Discussion of Strawberry Grades—A. W. Pomerenning, Wis. Dept. of Markets, Madison, Wis.

10:30 A.M.

Cooperative Marketing for Strawberry Growers—Prof. R. K. Froker, Dept. Economics, University of Wis.

11:00 A.M.

Fertilizers and Varieties of Strawberries—H. J. Rahmlow, Sec'y Wis. Horticultural Society

11:30 A.M.

Diseases and Insect Problems of Small Fruits—E. L. Chambers, State Entomologist, College of Agric., U. of W.

Brief History of Dunn County Cooperative Fruit Growers' Ass'n.—Orville Hendrickson, Mgr. Dunn County Fruit Growers' Ass'n.

Basket Dinner at Riverside Park—Coffee, cream and sugar free.

1:30 P.M.

Automobile trip. West side of Red Cedar River to Irvington; thence to Ferdinand Neubauer's Fruit Farm; thence to C. V. Porter's Fruit Farm; thence to C. M. Russell's Paper Gardens and thence to the following:
Menomonie Nurseries
Fred Hecklinger Fruit Farm
Dunn County Asylum — Small Fruits, Apples and Garden

NORTHERN WISCONSIN STRAWBERRY AND RASPBERRY DAY

Auspices Wisconsin State Horticultural Society Bayfield Fruit Association Cooperating.
Bayfield,

Tuesday, June 18.

A STRAWBERRY and raspberry day for Northern Wisconsin has been planned at Bayfield on Tuesday, May 18.

This section of the state is in a very favorable position for the production of small fruit. A general get-to-gether once a year, just preceding the fruit harvest, at which growers can see and hear how their neighbors grow berries should be quite valuable.

The program will be as follows:

PROGRAM

A. M.

9:31 Assemble at Vocational Building, Bayfield.

9:45 Meeting opened by Vice President M. B. Goff, Sturgeon Bay. Greetings by Glenn Scott, Editor Bayfield Press.

10:00 Prospects for Small Fruit in Bayfield County — County Agent R. J. Holvenstot.

10:20 Fertilizers and Varieties as Observed in Different Sections of Wisconsin—H. J. Rahmlow, Madison.

10:40 How I Grow Berries—Harvey Nourse, Bayfield.

11:00 What's being done in the Bayfield Demonstration Orchard (To be continued in orchard)—C. L. Kuehner, Madison.

11:15 1. Experiences in Cooperative Marketing.
2. Prospects for Growing Cherries in Wisconsin—M. B. Goff, Sturgeon Bay.

P. M.

12:15 Strawberry Shortcake Dinner at Federated Church 35c.

1:30 Tour under direction County Agent Holvenstot.

Visits to Outstanding berry fields in vicinity.

Discussion of varieties, soil handling, pruning and winter protection by growers and visitors.

Everyone interested invited to attend.

STRAWBERRY DAY AT WARRENS

A VERY good crowd and an interesting meeting is anticipated for the 2nd annual State Strawberry Day meeting at Warrens on Saturday, June 15. County Agent Kuenning, Rex Eberdt, Mgr. of the Association at Warrens, and many prominent strawberry growers, are working hard to make the meeting a success.

Due to the cool weather during May, no doubt the strawberries will not ripen as early at Sparta as at first expected; and, therefore, the Warren's growers are expecting a good attendance of Sparta growers. Most of the berries from both sections are shipped cooperatively, and the greatest success will only come by cooperation between the two groups. Meeting together and learning to know each other will help a great deal.

The program will be as follows:

THE PROGRAM

Meeting in Legion Hall

9:30–10:15	Discussion of Grades, A. W. Pommerening, Madison.
10:15–10:30	Marketing Problems, Rex Eberdt, Warrens.
10:30–11:00	Cooperative Marketing For Fruit Growers, R. K. Froker, Madison.
11:00–11:15	Growing Berries at Sparta, J. E. Leverich, Sparta.
11:15–12:15	Fertilizers, Varieties and Grades for Strawberries, Prof. R. S. Colby, Urbana, Illinois.
12:30–1:15	Strawberry Shortcake Dinner. By Woman's Mission Circle—35c.
1:30–	Field Tour directed by County Agent Kuenning to outstanding strawberry and raspberry fields near Warrens to study various problems. Discussion of Disease and Insect Problems by Prof. R. E. Vaughan and E. L. Chambers, Madison.

NURSERIES AND GROWERS DONATING PLANT PREMIUMS FOR STATE GARDEN AND FLOWER SHOW

THE following growers and nurserymen helped the State Garden and Flower Show by donations.

American Forestry Company, Pembine, Wisconsin.
20 American Arbor Vitae, 4 ft., to be exhibited at the show winner to take trees on Sunday, June 9th, or to be shipped express collect.

Edwin T. Anderson Nurseries, Madison, Wisconsin.
Perennials to value of $10.00 to be selected from catalog. Shipped in season.

V. E. Brubaker, Washburn, Wisconsin, Chequamegon Flower Gardens.
Lupines and four varieties of rock plants (Tunica Saxifragia, Siline alpestris, Alpine poppies) to value of $10.00.

Coe, Converse & Edwards Nursery, Ft. Atkinson, Wisconsin.
Shrubs or perennials to be selected from catalog to value of $10.00.

Fitchett Dahlia Gardens, Janesville, Wisconsin.
Dahlias to be selected from catalog and shipped in season to value of $10.00.

Floriadale Gardens, Ft. Atkinson, Wisconsin.
Gladiolus bulbs to be selected from catalog and shipped in season to value of $10.00.

John F. Hauser, Bayfield, Wisconsin.
Selection of perennials from catalog.

Kellogg's Nursery, Janesville, Wisconsin.
Peony bulbs to be selected from catalog and shipped in season to value of $5.00.

Walter F. Miller, Sun Prairie, Wisconsin—Rainbow Gladiolus Gardens.
Gladiolus bulbs to value of $25.00. Peonies to value of $25.00 both to be selected from catalog and shipped in season.

Miss Emma E. Patterson, Burlington, Wisconsin.
Gladiolus bulbs selected from catalog before January 1st, 1930 to value of $25.00.

N. A. Rasmussen, Oshkosh, Wisconsin.
Selections from catalog to value of $10.00.

Schmidt Nursery, Madison, Wisconsin.
Berberis thunbergi (18x24 inches) and Golden Bell or Forsythia.

Sisson's Peonies, Rosendale, Wisconsin.
2 Therese peonies at $3.00 each (2nd highest rated). 1 LeCygne $6.00 (highest rated). 1 Walter F. Miller $25.00 (new). 1 Los Angeles Iris (new $25.00). 2 Lent A. Williamson Iris.

Swartz Nursery Company, Kenosha, Wisconsin.
Perennials or shrubs to be selected from catalog to value of $25.00.

Terrell's Aquatic Farm, Oshkosh, Wisconsin.
Collection of ten ornamental and flowering plants.

W. A. Toole, Baraboo, Wisconsin.
Perennials or rock garden plants selected from catalog to value of $25.00.

White Elm Nursery, Hartland, Wisconsin.
Perennials or Nursery stock selected from catalog to value of $25.00.

PREMIUMS DONATED BY OUT-OF-STATE NURSERIES AND GROWERS

Brand Peony Farms, Faribault, Minn.
Mary Brand, Charles McKillop, Laura Dexheimer Peonies to value of $6.00.

D. Hill Nursery, Dundee, Illinois.
1 Rock Garden collection.

Meadow Mountain Bulb Farm, Granite Falls, Washington.
Daffodil bulbs or bearded iris to be selected from catalog to value of $5.00.

Naperville Nurseries, Naperville, Illinois.
Shrubs or perennials to be selected from catalog to value of $10.

W. Atlee Burpee Company, Philadelphia, Pa.
Seeds or plants to be selected from catalog to value of $8.00.

SILVER VASES

Silver vase by Rank and Motteram, Jewelers, Milwaukee, Wisconsin.
Silver vase by Milwaukee Journal.

"Johnnie," said a teacher in physiology class. "Can you give a familiar example of the human body as it adapts itself to changed conditions?"

"Aunt gained fifty pounds in a year, and her skin never cracked."

"Half the City Council are Crooks," was the glaring headline.

A retraction in full was demanded of the editor under penalty of arrest.

Next afternoon the headlines read: "Half the City Council Aren't Crooks."

About the Home and Garden

MRS. C. E. STRONG, Editor, 877–79th Ave., West Allis

Grow Cabbages—that thou may'st eat and live.
Grow Flowers—that thou may'st have and give.
For life is complex and its needs demand,
That Flowers and Cabbages go hand in hand.
—Author Unknown.

MANY years ago I read those four lines, the message so impressed me that I have never forgotten them.

We must eat in order to live—so we grow cabbages, that is well. But if we live only to eat—that is selfishness. If we add flowers—for ourselves and others—we are adding with them, Unselfishness, Beauty, Love, Friendship, Contentment, Happiness.

LET'S VISIT GARDENS AND NURSERIES

WHEN gardens are in bloom, an automobile is a most desirable possession; for you may drive many miles in a few hours, and, best of all carry home in that car, easily and safely, plants in full bloom.

Studying catalogues is fascinating, when cold winds blow and snow covers the ground, but from May until October, give us an automobile with a capable driver—preferably an enthusiastic gardener, but lacking such, one of those long suffering patient type will do.

We stress the "patient" because who wants to be urged to "hurry up" just because it looks like rain—or its hot—or 12 o'clock or 6. What does rain or sun or meal time mean to flower lovers as they trail happily though wearily up and down nursery rows, exclaiming over the beauty of this and that plant or blossom, stopping often to say, "Oh, I just must have that, and that, and that.

When we first invaded the nurseries, I think we were looked upon with disfavor, digging up plants in full bloom was not the usual thing. But times have changed. Now-days the nursery man meets us with a smile, digs and wraps any plant we ask for, and just as smilingly and cheerfully packs the plants around us in the car, roping the overflow safely on the running board. He has learned that other cars with more flower lovers will follow, buying plants, "Just like those Mrs. A bought yesterday, or last week.

He has learned also that there are very few complaints of the plants not living; the pleasure of seeing the blooming plants growing in the gardens without having to wait the usual time, induces the owner to plant carefully and water well; thus the plants have an opportunity to become well rooted. There is really a great deal of pleasure in taking home a plant in full bloom. It is a delightful reminder of the trip, and a revelation to many people whose ideas of a garden were many months of weeding and hoeing—and then perhaps only a few scrawny plants and few flowers. One woman said after a few such trips, "Why if those plants do not live over, I have been repaid many times what they cost. I have seen them in the morning with the dew on, I have loved them when I have walked in the garden at sun down, I know how really beautiful a garden can be made. Of course I hope they will live, I am taking good care of them, but if they do not, I can go back and get some more. Never will I have to be without a garden, even though I know but little about plants. There are rows and rows of them waiting for some one to come and get.

So take your car and "patient" driver and hunt up every nursery for miles and miles. Garden Clubs can have splendid meetings in a nursery. Ever try it? If you have not, there is something to look forward to.

"Pop, what's a monologue?"
"A monologue is a conversation between husband and wife."
"I thought that was a dialogue?"
"No, a dialogue is where two persons are speaking."

FEED AND WATCH THE BIRDS

HOW many readers have feeding trays for the birds during the migrating period? It surely is interesting to watch our feathered friends as they spy the filled trays. Some are so hungry they just "gobble" the food; others eat daintily, even though gratefully. After a few years, it becomes a habit to stop, some times to stay and nest. They must also whisper to friends down south about the good meals and pure water to be had at certain garden spots, for birds never seen before put in their appearance this year. Some have even gone about inspecting places in which to start housekeeping.

Since the birds have taken up their abode, ants have disappeared rapidly along with many other unpleasant bugs and pests.

Mulberry, Cherry and June berry trees seem to satisfy the craving for fruit, they seldom bother the strawberries. I would not blame them if they did, what is more delicious than a red ripe strawberry.

As I look from the window the garden is full of birds, all eagerly searching for worms, bugs and every tiny crawling or flying insect. It is a way they have of saying "thank you" for the food put out for them when they arrived, weary, hungry, thirsty.

In the little rock garden dwells a family of snakes. Do not shudder, just watch them "lick" up green aphis. A great toad also has found a cool spot; he too is interested in the aphis and other pests, licking them up with great satisfaction. Truly a garden is a school room, with living books.

SAVE FLOWERS OF STATE

ASSEMBLYMAN M. B. Goff of Sturgeon Bay and a graduate of Cornell university, recently introduced a bill into the legislature for the protection of flowers, especially the

trailing arbutus and orchids near his home. Now the Milwaukee museum, the conservation commission and the Izaak Walton league believe that instead of protecting the rare flowers in piecemeal fashion the entire state ought to be included in Mr. Goff's bill.

The tourist season is soon to open, Huron H. Smith of the museum points out, and that will mean further mutilation of flowers, which are now rapidly disappearing from the countryside. Residents of the state are included in the tourist group also.

State Only One Without Law

"Wisconsin is the only state in the middle west which has no law protecting flowers—lotus excepted—and the results of it are becoming more obvious each year," said Mr. Smith. "Most of our spring flowers should be protected, but they bloom at the most tempting time of year, unfortunately—when a long winter has just passed and when wild flowers are a novelty. Later on in summer the novelty wears off.

"Precedents have been set by other states. In Arizona the 'destruction, multilation and removal' of wild flowers is punishable by a fine of $50 to $300, each offense being separate. Ferns, lilies, one iris, columbines, 20 different kinds of cactus and century plants are protected.

"We should have some such law for Wisconsin, for we have many more tourists than Arizona."

A letter sent by Haskell Noyes of the conservation commission to Mr. Smith, in commenting on the Goff bill, said: "There is no question that more must be done in the way of legislation, but even more important is the proper educational work."

Letters urging an enlargement of the bill have already been sent to Mr. Goff.

Futile to Pick Them

Trilliums, pasque flowers, bloodroots, Dutchman's breeches, wild geranium and ginger, Jack in the pulpits, phlox, shooting stars and puccoons (the small butter yellow flowers) all should be protected, according to the botanist.

He says the futility of picking the wild flowers is obvious; they wither before flower gathering parties can take them to the street car or to their automobiles. In many cases the blossoms are picked in such a way that the roots never again have a chance for more flowers.—Milwaukee Journal.

IN APPRECIATION

THOSE in charge of the Garden and Flower Show wish to express their appreciation to the Management of the Loraine Hotel of Madison for their splendid cooperation in staging the Show.

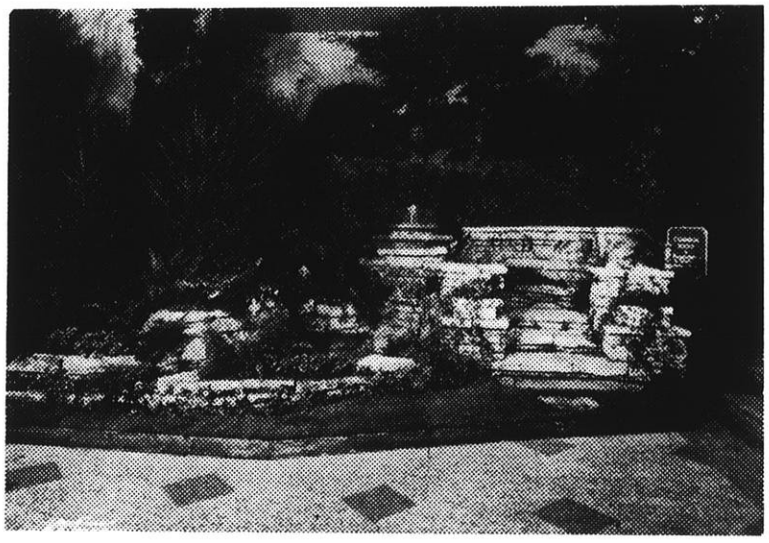
Fitzgerald, Manager of the hotel, had only one answer to our requests: "You can have anything that will help to make the show a success." No charge whatever was made for the use of the rooms, and we are allowed to charge admission.

State Garden Club Federation News

MRS. R. H. MALISCH, President
Hales Corners

MRS. C. W. VAUGHN, Vice-president
Madison

MRS. A. W. SPERBER, Sec'y–Treasurer
Hales Corners



A Flower Show "Feature Garden" Chicago Flower Show.
Cut Courtesy Wisconsin State Journal.

SPRING'S PALETTE

Who says that yellow and pink
don't blend,
When Nature says that they do
By placing in spring,—time without
end,
These shades in harmony, true?

The warbler flashes glints of yellow
Through apple trees, pink and
white;
And the wild canary sings his song
From the early morn to night.

The little Scotch rose of dainty mold,
In June its pinkness sends,
Just as the lilies unfold their gold
Out where the garden ends.

Look at the meadows,—billowing seas
Of gold dandelion spray;
While the pink-sailed ships,—the old
crab trees,
On their heaving bosoms lay.

There's nothing wrong with Nature
Mother,
Howe'er she mixes hues;
She is to them an artist lover,
And blends them all with her dews.

By member Elkhorn Garden Club.

THE GARDEN AND FLOWER SHOW

AS THE State Garden and Flower Show will be held at about the same time the magazine is ready to be mailed we will be unable to tell anything about it in this issue. However, all indications point to a very successful show. The Garden Club projects are creating a great deal of interest. Every Garden Club affiliated with the Federation has agreed to put on some type of exhibit.

The committees in charge of projects are very much interested in the work, and many have stated they are learning a great deal. As one lady remarked: "When you have finished making a miniature garden of your own original design, you have taken a course in landscape gardening."

One learns most thoroughly by actually doing something. The committees in charge of each project will learn a great deal in planning and preparing their exhibit. Then they will learn a great deal more by studying similar exhibits by other Clubs.

We feel confident at this time that the Garden and Flower Show will become an annual event. The first show will be the hardest to put on. We face many difficult problems this year. First of all, the Federation has very little money—only about enough to pay the traveling expenses of the officers to the show. We have no idea how many people will attend, so it is difficult to judge what the budget of expenditures should be. Also, only a small proportion of the Garden Club members have ever seen the type of show we are attempting, and are somewhat reluctant to undertake such projects as the "little garden," or a miniature garden.

Given good weather we feel confident that the show will be a success. The Madison Garden Club, in fact all the Clubs, have been anxious to help. There has been no lack of cooperation. If anyone has any criticism of the show when it is over it can, no doubt, be blamed to lack of experience and lack of funds.

Our main hope is that the attendance will be such that the Federation may have a fair balance in the treasury, to be used in putting on a larger and better show in 1930, and also in helping the Garden Club movement in Wisconsin.

"Son, what does this 60 mean on your report card?"

"That's the temperature of the room, father."

WATER GARDENS

Water gardens are not for the trained and experienced or professional gardeners alone, as many have supposed.

Amateurs may enjoy their charms, for many of our most beautiful water lilies are as easy to grow as the better known and more widely planted garden favorites.

The water garden is a feature which has assumed new importance recently as a contributor to a complete landscape design, not only in the more elaborate gardens but also in the more limited garden developments where the owner is his own gardener.

The water garden often is highly effective in providing one of those "points of interest," complete in themselves yet related to the design as a whole, which your garden should have if it is to develop its full power of fascination.

You must plan your water garden. To be a success it must have plenty of sunlight; to fit into your landscape it should be developed with a relation to the other features of your garden design.

A water garden is out of place in the center of a lawn, and from lack of intimacy in such a location it may lose much of its charm. Many plants grow naturally in moist places. If some of these can be placed partly surrounding the water garden the resultant impression of seclusion will add to the charm of the water garden itself.

Running water is not essential. It may, indeed, prove harmful, for water lilies love warm water and sunshine. Aquatic plants will grow in many kinds of containers, varying from tubs made by sawing a watertight barrel into halves, to elaborate concrete pools.

A depth of from one to two feet of water is suitable, and the roots may be set in soil in the bottom of the pool, or set in tubs of soil which are lowered into the water after the roots are planted.

Soil for water lilies should consist of three parts of good garden loam and one part of completely decomposed cow manure thoroughly mixed before the planting is done. The tops of the plants should be submerged so that their crowns are from six to eight inches below the water surface.

One may plant the hardy water lilies as soon as the deciduous trees are well started into leaf. A concrete pool should be built at least a month before planting time so the water may be changed several times to insure purity when the plants are set out.

To exterminate undesirable plant and animal life after the pool is established goldfish and scavengers usually are placed in the water.—Racine Journal.

GARDEN CLUB SETS MEMBER GOAL OF 500

Fifty members of the Eau Claire Garden club met for supper at the Y last night. Mrs. A. L. Murray, president of the club presided. Reports were made by the Treasurer C. W. Dinger and by D. O. Hibbard, chairman of the membership committee.

Mr. Hibbard stated that the committee felt that the club had a dual purpose, one, to get out of the club all of the help and information possible for the member's own garden, and, two, to promote the garden idea throughout the community. He stated that a goal of 500 members was mentioned. The slogan "For a more beautiful city, join the Garden Club" was offered by the membership committee.

Committees announced by the president were, posters and advertising, Miss Victoria James; visiting committee to view gardens, Mrs. J. D. R. Steven, Mr. H. B. Bezansen, Mrs. O. N. Fisher, Mrs. Ben Haag, Mrs. G. O. Linderman; arrangements committee, Mrs. F. T. Brunk, Mrs. C. W. Dinger, Mrs. A. J. White, Mrs. W. A. Standen.

At the next meeting of the Garden club, Mr. Walter Demmler will discuss the building of rock gardens. Mrs. T. J. Keith, Mrs. F. W. Hobbs and Mrs. F. S. Cook will discuss their favorite perennials.

Mr. H. D. McNairy addressed the Garden club last night on the subject of shrubs and perennials for landscaping purposes. Following the address he answered questions asked by members of the club.

The gardens on First avenue are to be recognized this year by the Garden club. Mrs. A. H. Shoemaker reported that the Woman's club department which she represents is promoting the window box garden throughout the district and that the recommendations of the Eau Claire club are being used in this connection.

Mrs. Murray announced that there would be two flower shows this year and that there would be exchange of visits with Spring Valley and Menominee.—Eau Claire Telegram.

OSHKOSH SOCIETY JOINS FEDERATION

AFTER a fine supper the May meeting of the Oshkosh Society was called to order by the President, Mr. John Geiger. The minutes of the April meeting were read and approved.

The matter of joining the Wisconsin Garden Club Federation was discussed. Letters from Mr. Rahmlow and Mrs. Malisch relative to the Garden Clubs were read. It was moved and seconded that we join the Garden Club Federation and the motion was carried.

Mr. N. A. Rasmussen told about the progress being made in the contest to beautify the grounds of gas stations on the main highways approaching the city. All but one asked have been willing to enter this contest. The score card will be published in the "Northwestern."

The condition of the grass plot around the Soldier's Monument in Monument Square was discussed. A letter regarding its improvement was written to the Mayor and Councilmen.

Mr. John Roe gave an instructive talk on evergreens, their care and planting.

Mrs. Kuebler gave an interesting talk on the flowers of Colorado and Yellowstone National Park. She also showed many specimens and pictures of the flowers.

Mrs. James Roe talked on Florida, especially about the flowers and fishing there.

The Annual Flower Show was discussed. Miss Merle Rasmussen was appointed chairman of the committee to work on it. The date could not be definitely set because the flowers were not far enough advanced.

Florence Winchester,
Secretary.

HILLCREST GARDEN CLUB MEETING

MRS. GEO. A. LEVERENZ, Sec'y.

THE Hillcrest garden club of West Allis met in April at the home of Mrs. H. Hohberg.

Mrs. Fleischer read a poem called "Daffodils" by Wm. Wordsworth. The secretary read a letter from Mr. H. J. Rahmlow in regard to his lecture here on "Wild Flowers". The secretary was instructed to invite the following clubs; West Allis, Hawthorn and Hales Corners. The lecture was held at the West Allis Vocational School.

"Iris" is to be the topic for our next meeting. Mrs. Behlindorf will speak on Beardless Iris, Mrs. Sampson on Bearded Iris and Mrs. Ruegg on care and fertilization.

Dr. Raleigh of the Swift Company gave a very good talk and demonstration on soils and the use of fertilizers. All sorts of questions were asked by members and visitors which proved interesting.

On April 15th the club met at the home of Mrs. Simmons.

The entire meeting was given to the discussion of our State Garden and Flower Show to be held in Madison June 7-8-9. It was moved and seconded that our club make exhibits in all five projects. Committees were appointed to plan the various projects.

Mrs. Horton is to read the poem at our next meeting, which will be held at the home of Mrs. Berger.

RACINE CLUB DISCUSSES GARDEN PROBLEMS

DIFFICULTIES encountered in growing gardens were discussed at a meeting of the Racine Garden club held May 14 in the public library.

J. A. Beck, Racine florist, was the principal speaker; and talked on troubles confronting those raising house ferns. He said the remedy was water, and explained that those raising ferns do not give them enough water during the winter months. He explained how to take care of plants and cut flowers after getting them from the greenhouse. He suggested that they be given more water and kept cool at night.

In answer to a question on how to winter pansies, he said beds should be raised to keep ice from forming and smothering out the plants. Lilies and their care was explained by both Mr. Beck and John Hood. Mr. Hood brought a collection of choice Iris which he distributed among various members.

Mr. Beck offered a red carnation to each member who attends the State Garden and Flower show in the Loraine hotel, Madison, on June 7, 8 and 9.

Frederick Meyers, president of the club, announced coming events, including the state flower show, the Door county cherry festival on May 23 to 26, and Wisconsin Strawberry day at Warrens, Wis., on June 15.

MADISON CLUB HAS OUTDOOR MEETING

EIGHTY members or friends of the Madison Garden club attended an outdoor supper at the home of Fred Bodenstein, 220 W. Washington avenue for the May meeting. Mrs. Bodenstein, who is in North Carolina, sent a large quantity of mountain laurel and azaleas which were used as decorations in the Bodenstein rock garden.

Mr. Bodenstein had constructed a replica of the Garden club park on West Monroe street.

Following the supper, M. B. Olbrich described the work accomplished to date by those who planned an arboretum on the western shores of Lake Wingra.

"The Madison Parks Foundation has acquired title to 172 acres of land which has unrivaled possibilities for a plant and game refuge," said Mr. Olbrich. "The balance of a special university fund, $80,000 in all, will be available when the citizens of Madison raise a similar amount. We have $40,000 already pledged.

The Arnold arboretum at Harvard university and the Shaw gardens at St. Louis were briefly described by Mr. Olbrich to show what permanent policies and adequate means can produce. Illustrations of these garden spots were shown.

"The Lake Wingra tract has vastly greater natural possibilities than any existing arboretum of my knowledge in the United States," said Mr. Olbrich.

Preceding Mr. Olbrich's speech Mr. Bodenstein used a large wooden frame and several club members to present posed "garden pictures" which might be copies in miniature for small gardens. The Apollo Belvidere, Colossus of Rhodes, the Gleaners, and other characters were shown.

Plans for the State Flower Show were discussed in detail and committees made brief reports.

PIERCE COUNTY SOCIETY MEETING

MRS. ALVIN D. HURTGEN

THE first central meeting of the season of the Pierce County Horticultural Society was held at the Firemens Opera House at Ellsworth May 10, our program being a part of the central Bird House Contest program.

Mrs. W. C. Bittner one of our members gave a very interesting talk on wild shrubs and vines that may be used for home beautification. Samples of these shrubs and vines were on exhibition as also were the bird houses that had won prizes at the different district contests throughout the county. Prof. Melotte of the River Falls Normal gave a talk on birds and their use to gardeners and a very good movie on birds was shown. After the program a plant sale and a short business meeting was held.

It was voted to hold our spring flower show at Spring Valley, arrangements to be made by the Spring Valley Garden Club, which is a unit of the Pierce County Horticultural Society.

A sum of $25.00 was voted to be used as prizes in the home beautification contest. Fifteen families have entered the contest all of whom live along highway 46.

It was also voted that a cup should be given as a trophy to the 4H club making the best display at the Pierce County Fair to be held in September.

This cup is to become the property of the club that wins it three years in succession. Our next meeting is to be held at Spring Valley May 24.

ELKHORN GARDEN CLUB LANDSCAPE SCHOOL GROUNDS AND PARK

Through the efforts of the Garden club the school lawn and the park will have flowering shrubs set this year. At the school grounds the committee not only planned for flowers throughout the season, but for berries for the birds as well.

At the school grounds, the heavy bulk of shrubbery is placed near the grade building. In that bed are 2 high bush cranberries, 12 bridal wreath, 6 snowhill hydrangeas, 12 pink spirea and 4 tamarix.

In front of the high school building are snow berries and 2 Japanese lilacs. A bed of rugosa roses, which bloom all summer and fall, will be added. The board of education will pay for these shrubs.

On the park 10 vines are to be set against the band shell. These will be paid for with a small fund which was left when the band shell was built.

Near the south west corner of the park three beds of the rogusa roses will be set. Farther east, on the south side one bed of snowhill hydrangeas, and two smaller beds of pink spirea will be set. The Garden club members will also set some bulbs along the park, later in the season. The shrubs on the park will be paid for by the city council and the Garden club. Mrs. H. D. L. Adkins is chairman of the committee which arranged for this planting of shrubbery.

CLUB HEARS OF BEST WISCONSIN ROSES

STEREOPTICON views of the best garden roses suited for Wisconsin's climate were shown Tuesday night at the monthly meeting of the Madison Rosarian club, held in the university horticultural building. H. J. Rahmlow operated the refletroscope while Mrs. H. E. Johnson gave a descriptive talk on the various types.

The pink radiance, Mrs. Johnson said, is the best garden rose for any climate, hot or cold, and the pink radiance, the Los Angeles, the Mary C. Egan, and the Prenet, all native to America, are recognized as being of exceptional hardiness and much beauty.

Mrs. A. A. McLeod read a paper on "Planting, Culture and Fertilization," and Mrs. J. A. Reed gave a talk on "Spraying Roses to Combat Diseases."

The club which was organized recently, voted to affiliate with the Madison Garden club and the Wisconsin Horticultural society.

The officers of the club are Mrs. Harry Stagner, president; Mrs. Peter Lundt, secretary; Mrs. J. A. Reed, chairman of the publicity committee—Madison State Journal.

DURNG the past month the editor had the pleasure of meeting with the following Garden Clubs: Jefferson, Ft. Atkinson, Hartland, West Allis (including Hillcrest, West Allis and Hales Corners Clubs,) Elkhorn, Kenosha and Racine.

The primary purpose of these meetings was to explain the projects to be held at the Garden and Flower Show and ask the Clubs to take part. In this we were quite successful, as all the clubs agreed to help. Whether we were as successful in interesting the members in the talk and slides on flowers and landscape gardening we have not yet decided.

We hope that it will be possible to visit each club in the state each year. It may not be possible to attend the regular meetings of each Club, since that would require a great deal of time and money, but if a trip can be made taking in a number of clubs, both afternoon and evening, it surely can be done.

THE APPLE MAGGOT

(Continued from page 298)

gathering and burying the fruit to a depth of two feet underground. Maggots buried to a lesser depth quite frequently succeed in coming up through the soil and emerging as adults. The other method, that of spraying, demands that the application of the spray be made at just the right time. In order to be most effective, an arsenical spray of one pound of arsenate of lead to 50 gallons of water should be applied immediately after the flies appear in the orchard. This time can be easily determined by the grower by watching the orchard and perhaps sweeping the foliage with an insect net. During 1928, these flies emerged about the first week of July. However, considerable variation is possible, and so the date should be set not by the calendar but as the result of a careful watch being kept for the appearance of the flies. This spray should be repeated in two weeks, and the spraying should be thoroughly done, the last named spray, at least, put on without lime-sulphur. If the pests are particularly serious, it might be worth while to add still another spray about two weeks after the one last named.

PRUNING DEMONSTRATIONS POPULAR

COUNTY Agent R. B. Pallett of Milwaukee County conducted six orchard pruning demonstrations together with specialist C. L. Kuehner of the College of Agriculture. The demonstrations were well attended and much interest was exhibited by those present. In connection with this effort one new spray ring was organized and seventeen orchardmen agreed to try out commercial nitrate fertilizers on their fruit trees.

Varieties and Culture of Roses

Papers by Club Members

THE BEST HYBRID TEA ROSES

American Rose Society Selects the "Best Dozen"

MRS. H. E. JOHNSTON

This paper on the best Tea Roses was presented by Mrs. Johnston before the Madison Rosarians at their May meeting.

Colored pictures of the roses mentioned were shown by the use of a reflectoscope.

A REFERENDUM vote taken by the American Rose Society selected the following "dozen" as the best and most desirable varieties of roses for general cultivation. Hardy in the United States with winter protection which is simply earth hilled 8 to 12 inches high around the bushes. They are listed in the order of their popularity.

1. Radiance — Vigorous growth, hardy and continuous production of lovely, light silver-pink flowers, with a deeper pink on the reverse side of the petal.

2. Red Radiance—As good as its parent, Radiance, in habit of blossom and growth, lovely, deep red, with an intense fragrance.

3 Ophelia—Delicate salmon flesh, shaded with rose, long, pointed buds on stiff stems, Trdd blooming, with beautiful foliage.

4. Souvenir de Claudius Pernet—A yellow rose that does not fade as the buds open up and the petals become exposed to the sun. Long, pointed buds, opening up to large, full blooms, bushes vigorous and erect.

5. Los Angeles — A flame-pink, in color, over laid with golden yellow deep at the base. A long pointed bud opening to a most perfect flower, with full reflexed petals.

6. Madam Butterfly — A strong grower, producing a large flower. Color a blending of bright pink, apricot and gold. Very fragrant.

7. Duchess of Wellington—Large, well formed, semi-double, saffron bud, opening well. A yellow rose, fragrant, absolutely to be depended upon to produce flowers during the season.

8. Columbia—Very vigorous, fragrant, rose-pink buds, held erect on long stems. Color deepening as the blossom opens. Good keeper as cut flower.

9. Mme, Edonard Herriot—Large, semi-double flowers of terra cotta, bronze, Heranium red and dull copper. Long pointed buds and a free bloomer.

10. Gruss an Teplitz—Velvety crimson-red. Very free flowering. Reddish green stems and foliage.

11. Mrs. Aaron Ward—Very double pointed buds of deep Indian yellow. Vigorous in growth. Always blooming.

12. Kaiserin Augusta Victoria,—Creamy buds which develop into well formed, ivory-white blooms. Free blooming and hardy.

TREATMENT ON ARRIVAL, PLANTING, PRUNING AND CUTTING BLOOMS

MRS. WM. HOPKINSON
Milwaukee Society

WHETHER roses are gotten in the fall or spring remains for each individual to decide for themselves. But what ever time they are received do not unpack until ready to put them in the place they are to grow and at all times protect the roots from the air and sun, as the fine hair roots can easily be damaged and that retards the growth. A good way is to have a pail filled with water and insert the roots of the bushes in the pail.

Examine the roots and any broken or bruised ones remove with a slanting cut, so that fine roots will have a chance to have more surface for growth. In planting dig the hole plenty wide and deep, so not to cramp the roots and do not place the bush any lower in the ground than it has been growing and always have some soil that is just moist not wet to fill in around the roots with the hands, and be sure that you get some soil in between every root, so that no air pockets are left in there, when about half full of soil gently press down but with one hand holding the plant all the time. Then add more soil and use your feet to press the soil down firmly, as a loose rose will not grow well nor give many blossoms. If well planted it will be solid and do not have it any higher than its neighbor.

If hybrid teas are planted they can be placed twelve or fifteen inches apart and they will help to shade each other as they like to have their roots cool.

If the ground is dry, water freely and when all has soaked in put some loose soil as a mulch which will cover the hard packed surface where your feet have been working. On a new rose bush just planted do not leave more than four or five leaf buds on each stalk, and if possible have the last one on the stalk on the outside away from the center of the bush, and four main stalks are all that should be left and you will have much larger roses as the result and it also gives more life, strength, shape and vigor to the bush and substance to the blossom when pruned severely.

In pruning be sure to make a clean cut and not a bruised one and make it at least a quarter of an inch above the last leaf bud.

When the leaf buds begin to swell is the time to give action to your pruning shears on the bushes that have been in the

ground from previous years. Then you can see what stalks to remove or to prune back.

Hybrid Perpetuals I prune back sometimes to eight or ten inches to keep them low and conserve space, and also to give me larger blossoms. The small flowering climbers must be pruned after the blooming season is done with to give the new stalks that already will be seen pushing their way up from the root and they will need all the strength of the plant to grow strong for next year.

The large flowering climber only the old stalks are removed if there are too many and they crowd each other.

In cutting the blossoms from the rose bush take as long a stem as you possibly can get after leaving at least two leaf buds on the stalks, it will then throw out two branches from those leaf buds and that means more blossoms.

It matters not what goal we seek,
Its secret here reposes.
We've got to dig from week to week
To get results on roses.

Growing Roses

H. GUTKNECHT
Milwaukee Society

ANY good garden soil will grow roses if the location is favorable. The rose garden should be located in a sunny open place where there is a good circulation of air.

The best soil for roses is a medium heavy loam which has been enriched by adding a good quality of well rotted stable manure.

Most roses require a rich soil because the area reached by the roots is rather limited and being of perennial nature they need a good quantity of plant food for the production of abundant bloom.

If your soil is too light it is better to remove some of it and bring in a quantity of heavier soil to which well rotted stable manure has been added.

Bone meal is a good fertilizer for roses as it dissolves slowly and lasts for some time. It is a slow fertilizer so is best added when making the bed. Additional amounts can be worked in each spring.

There are many good commercial fertilizers on the market but one should be selected that does not contain too great a quantity of nitrogen.

If liquid manures are used it is best applied when ground is moist after or during a shower.

The average good garden soil requires little fertilizer after the bed has been properly prepared if the soil is kept well hoed so the sun and rain are able to do their share. Hoeing has a tendency to make roots go down into the soil deeper which is a great advantage to any plant.

USE OF PAPER MULCH

JAS. G. MOORE

JUDGING from the letters which come to my desk, there are more gardeners interested this spring in the paper mulch as a substitute for maintenance tillage than any other garden question. It is quite evident that a considerable number of home gardeners are anxious to escape what they consider the drudgery of gardening. Or shall we be charitable and say that the zeal inspired by the possibility of paper mulch gardening is due solely to the prospect of increased yields?

Davy Crockett once said, "Be sure you are right, then go ahead." Perhaps that is too conservative a policy for most of us but we have all been subscribing lately to the policy of "safety first." This would seem to be a good doctrine for the gardener contemplating using the paper mulch method. Many gardeners are going to be disappointed during the coming summer over the failure of the paper mulch system to produce the expected results.

The advantages of the paper mulch have been widely advertised. The claims made are based upon meager trials. Even these trials have not all been favorable. Little or nothing has been said about the difficulties involved in this method of gardening. The varying conditions under which the trials have been made are so limited as not to warrant the conclusion that the paper mulch is a satisfactory substitute for tillage even under average conditions.

I am not saying that the paper mulch method may not prove to be a good substitute for tillage. I do say, however, that the use of the paper mulch in growing garden crops is still in the experimental stage and it is not yet safe to recommend it for general practice. This position is also taken by the horticulturists of other experiment stations. But you say, "I want to try the thing out". Good, go ahead, but be conservative; don't do your whole garden this year. See how it works before going in too heavily.

AMONG OUR COUNTY AGENTS

DEMONSTRATION ORCHARD SELECTED AT BAYFIELD

THE final selection of a demonstration orchard was made by County Agent R. J. Holvenstot of Bayfield County, and C. L. Kuehner, of Madison.

This orchard consists of approximately three-hundred and fifty (350) trees of bearing age but has not been very productive in the past.

An intensive program of pruning, spraying, cultivation and fertilization will be initiated this spring. The program will be continued for a period of three years to bring the orchard into full production. The crop for the past few years has averaged a return of $180 whereas it is anticipated that proper management will increase the income from this orchard to $1200.

STRAWBERRY MOSAIC

R. E. VAUGHAN
Specialist in Plant Diseases, University of Wisconsin

STRAWBERRY diseases proved or suspected to be of virus type have been reported from time to time under such names as yellows, xanthosis, mosaic, yellowing, dwarf and witches' broom. The symptoms of these troubles and opinions regarding their causes vary greatly so that the whole group is in need of study.

The Bureau of Plant Industry of the United States Department of Agriculture has made arrangements to study strawberry diseases in cooperation with the Louisiana Experiment Station and have secured the services of an assistant in the small fruit disease project.

Any Wisconsin strawberry grower who has plants showing symptoms of yellowed, mottled, curled and dwarfed leaves are requested to get in touch with R. E. Vaughan, Plant Pathology Department, Madison, Wis., so that arrangements may be made to secure specimens of live plants. It is planned to assemble these plants at some point remote from commercial strawberry culture where a field study may be conducted with all possible safeguards against the spread of any disease. It is desired to start work on this project as soon as possible.

Potato Outlook for '29 Is Good

ACREAGE AND PRICE WILL BE SIMILAR TO THAT OF 1927

POTATO growers in United States report a decrease of 10.6 per cent in this year's plantings. Allowing for usual losses about 3,350,000 acres will be harvested. This will give us a crop of approximately 390,000,000 bushels. A price similar to that received during 1927 might be expected, according to I. F. Hall of the economics department of the Wisconsin college of agriculture.

"Lower yields per acre usually result after a period of low prices due to growers using poorer seed and paying less attention to the growing crop," says Hall.

Then states east of Montana that usually produce late potato surplusses intend to plant about 1,775,000 acres. They planted 1,974,000 acres last year and 1,806,000 acres in 1927. This suggests a price similar to the 1927 price.

There was a steady upward trend of the potato acreage from 1866 to the present time, but right now we apparently have reached the limit for a time at least. If we increase the acreage beyond what it is at the present time, prices will be so low that the crop won't be worth harvesting, according to findings at the Wisconsin college of agriculture—Madison State Journal.

OPERATING A SPRAY RING

(Continued from page 301)

thought it a hard task to get each apple almost alike and I had to select four trays and eight plates. The next morning I took the selected apples from our orchard, those from English Brothers' orchard, and from Mr. Cobb's orchard to the Racine County Fair. I had obtained the entry tags the day before so when I reached the fair grounds I went directly to Mr. Klumb's tent where most of the apples were.

When I reached home my folks asked me if I thought I was going to win any prizes but I told them I did not think so because there were too many apples. The next two days I had to fill silo so did not get a chance to attend the fair to see if I had won any prizes. Thursday evening I decided to go and see if I had won anything. I went directly to the tent where the apple exhibits were and found Mr. Kuehner. He immediately told me I had to do better work next year. I didn't know whether he was telling the truth or not so I went to look at my apples. There I saw the spray gun hanging on our spray ring trays. I guess I jumped about ten feet in the air when I saw it.

Then I went to see if I received anything on my project and sure enough, there hung a blue ribbon. I went back and told Mr. Kuehner he was mistaken because I couldn't do much better work. He stood and laughed. From there I went over to see if my neighbors won anything on their plates and they had four blue ribbons. I certainly was a happy boy. I went home and told my folks what I had won and they were happy too. The next day the fair was over and I brought the apples and the prizes home. The entire spray ring was as happy as I.

About the first of October we began to pick our late fall and winter apples, and took orders for them. After we had most of them picked we began to deliver them in Rochester, Waterford, Burlington, and Racine. I received from one and one-half dollars per bushel to two and one-half dollars per bushel.

For the spraying done in other orchards in the ring I was paid thirty five cents an hour. The spray gun which I won at the fair was worth seven dollars and was donated by the F. R. Gifford Company of Madison, Wisconsin.

One of the spray ring members said to me a short time ago, "I thought we would not get enough good apples for our own use when we started to spray as I noticed often after you had finished a tree it would rain. For the one spray you came over three times before you completed it because of the rain, but my four Duchess trees paid for the spray material and your wages."

By winning first prize on my project I will get a trip to Madison next spring with all expenses paid. Most of my spray-

ring members said, "if it were not for you we would have to buy our apples this year. We all certainly believe in spraying."

Income from Project:		
Total cash income, 390 bu. apples		$419.75
Products used at home, 50 bu. apples	$75.00	
75 quarts cherries	18.25	
		93.25
Total Income		513.00
Expenses of Project:		
Spraying	$22.00	
Saw Blade	.25	
Gasoline	.95	
Baskets	6.00	
		29.20
Rent of land, 2 acres		16.00
Labor expenses		31.71
Total Expenses		81.73
Total Profits		431.27

CULTURE OF IRIS

(Continued from page 294)

cess Juliana, deep blue; Prince of Wales, purple; Queen Alexandria, lavender.

Iris Filifolea

The variety, "Imperator," wonderful clear blue extra large flowers and Iris Tingitana of the variety, "The First" a very dark blue large bloom growing up to 3 feet tall.

Japanese Iris

Should be planted in a sunny moist location but not on a place where water will stand. Should be well watered just before blooming. Some varieties are: Gold Bound, white with yellow center; Alba Plena, pure white; Amethyst, delicate lavender; Painted Lady, white flushed with bright pink; Pyramid, light blue veined white; Vesta, ash gray purple veining and F. S. Ware dark garnet.

Dwarf Iris

(Iris Pumila and Pumila Hybrids)

Height 8 to 12 inches. Spread rapidly; a good border plant. Earliest to bloom is Atroviolacea, violet mauve; then Caerulea, sky blue; Citrea, yellow; Schneekuppe, white; and Cyanea a rich purple; very reasonable in price, about $3.00 per doz. There are quite a number of other varieties but these seem to be the most popular.

Bulbous Iris

Dutch, English and Spanish belong to this group. They are not grown commonly in this vicinity. Requiring special winter care and treatment. Should be planted in rich, sweet, garden soil about the depth tulips are planted. A bed of sand should be placed below to provide good drainage and a rather sheltered position is desirable. Good drainage is essential or plants will die. A heavy cover of marsh grass or leaves should be given in late fall to prevent winter kill by freezing and thawing putting a little fence of poultry netting or boards around to keep it in place until the shoots start to come up in the spring. Can also be wintered in cold frame covered with boards but should be mulched with leaves besides after freezing. Being a half hardy plant some advise taking up and storing with the tender flowering bulbs for spring planting.

FERTILIZERS ON STRAWBERRIES AND RASPBERRIES

(Continued from page 299)

clusters as those fertilized only in the spring. Furthermore, the fertilized plants produced a few more blossoms to the cluster than unfertilized ones.

Set of Blossoms. The plants fertilized the spring of the year previous to the crop year set about 30 per cent more of their blossoms than the unfertilized plants. Plants fertilized only in the summer, and those fertilized in both spring and summer, each gave increased sets of 63 to 70 per cent. Plants fertilized the spring of the crop year gave about 80 per cent increase in set compared to unfertilized plants. Those fertilized both in the summer of the year the plants were set and again in the spring of the crop year gave an increase in set of approximately 170 per cent. These results clearly show the necessity of applying nitrogenous fertilizer in the spring of the crop year if a material increase of set of blossoms is desired.

Yield. It was found that production was largely determined by the number of clusters to the plant and the percentage of the blossoms that set, and that size of crowns does not apparently affect production one way or the other. Hence, the data in the two preceding paragraphs would indicate that the largest yield would result of the crop year. Such plants produce yields nearly ten times as large as those from non-fertilized plants. Of course, these differences in yield are very much greater than would be expected on a heavier type of soil or on a garden loam. Summer applications gave higher yield than spring applications but still larger yields were obtained when the application was divided, half of it being applied in the spring and half about the first of August.

Recommendations: As previously pointed out, not all plantations will respond to commercial fertilizers. A good indication of the need of nitrogenous fertilizers is the presence of purple leaves, provided the purpling is not due to some disease. Then, of course, if the size of clusters, size of berries or set of blossoms are not what one should reasonably expect, the plants will likely respond to applications of nitrogenous fertilizers. Too much available nitrogen, on the other hand, will result in excess runner production and should be avoided.

If only one application each year is to be made, this application should be applied in the summer rather than in the spring, but it must be remembered that the best results will come from split applications,

putting on half of the fertilizers in the spring about the time growth starts, or just after the plants are set, and the other half about the first of August. The usual rate of application for sulphate of ammonia is 200 pounds per acre, while double this amount of acid phosphate is usually applied. On the basis of results that are available, it would seem better to use the combination of nitrogen carrying and phosphorous carrying fertilizers.

Raspberries

The raspberry is one of the most sensitive of all fruit crops to differences in soil, particularly so in regard to soil drainage, depth of surface soil, and kind of sub-soil. This fact has greatly delayed investigations because some plantations selected were found to vary much in soil conditions even though other crops grew uniformly on these soils.

For instance; we have been attempting to do fertilizer work with raspberries at the Michigan Experiment Station since 1922, but it was only in 1924 that we succeeded in getting an experiment under way in which the plants seemed to be growing uniformly enough to permit of this kind of work. I do not have the data from this experiment with me so must speak entirely from memory and in general terms rather than in those of actual yields. The results for the two years after the fertilizer experiment was started are very similar and I know of no reason why we cannot anticipate final results that will be very similar to our more or less preliminary ones.

In these experiments we are making comparisons of the three elements, nitrogen, phosphorous, and potassium to a certain extent but we are more particularly concerned with the time of application of these fertilizers. Since neither phosphorous or potassium have produced growth or yield better than those plants receiving no fertilizer, our discussions from this point on may be limited to nitrogen carrying fertilizers. The nitrogen has been applied in the form of sulphate of ammonia at the rate of about 150 pounds per acre, at four different times: (1) in early spring, (2) when the black raspberries show red, (3) about August 4, and (4) about September 5 to 10.

Those plants which were fertilized when the berries first showed red have given lower yields than any of the other nitrogen fertilizer treatments so we may dismiss this treatment from further consideration with the statement that fertilization at that time is both too late to be of value for the crops of that season and too early to be of benefit to the next year's crop.

The results from the early August and early September applications are quite similar though the September application has been somewhat superior from the standpoint of yield. We may then confine our consideration to the comparative value of two applications, one made in September and the other in the spring about the time that growth starts.

In both 1927 and 1928 the yields from the September application has been considerably greater than those from the spring fertilized plants during the first half of the picking season. In fact, the spring fertilized plants have produced yields not much greater than those from unfertilized plants for the first two pickings of the season. During the latter half of the picking season, however, the spring fertilized plants have greatly outyielded the fall fertilized ones and when we totaled the yields at the end of the picking season there appeared little difference in yield between the two treatments, the spring application perhaps giving a slight advantage.

If the grower is selling his crop to the canner, at a season contract price, it would make little difference whether the plants were fertilized in September or in the spring. If, however, one is selling the product on the fresh fruit market, prevailing early season prices are usually higher than those of the latter half of the picking season so that the September application should be the more profitable under these circumstances.

C. O. Ross, in the Minnesota Horticulturist, suggests a 4-8-6 commercial fertilizer for use around home grounds—25 lbs. per 1000 sq. ft. is suggested as a good application.

Michigan Special Bulletin No. 188 reports Duchess, Hyslop and Wealthy apples as being almost entirely self-sterile, which means that they must have other varieties blooming alongside them to set a fruit crop. It is stated that there should be at least one strong colony of bees to each acre of fruit trees to provide satisfactory cross pollination. In Michigan, bee men charge $2.50 to $3.00 per colony for the rental of swarms to orchardists.

Chemical treatments of corn, potatoes and garden seeds improve the growth of the plants not by stimulation but merely killing disease.

Lopsided apples are usually the result of poor pollination. If you will cut through such apples you will find the well developed side has many seeds, the poorly developed side few seeds, if any.

A. A. Hansen, of the Indiana Experiment Station, reports that quack grass can be eradicated by mowing and saturation a month later with sodium chlorate used at the rate of one pound per gallon of water. Two applications are needed for eradication, sometimes more.

Cultivation and Care of Viburnums

ARCHIE HILL

Low Growing Shrubs Are Best For General Foundation Planting. Maple-leaved Viburnum.

THE viburnums, both native and foreign, are all of easy cultivation. They are not particular as to soil and are well adapted for landscape work. In size they vary considerably, some species being only three to four feet high while others attain a height of twenty feet.

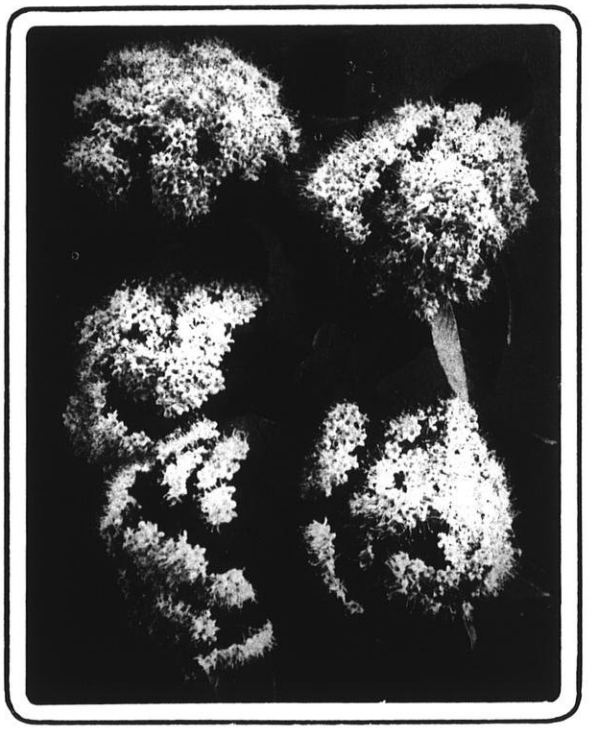
Every species has something to recommend it, while some are very fine indeed. The leaves vary greatly in size, shape and texture and as a rule are free from troublesome diseases.

The high bush cranberry (Viburnum opulus) and its sterile form, the snowball of our gardens, are very likely to be attacked by aphis, which causes the leaves to curl and even imparts a twist to the stems. Spraying with a contact insecticide such as nicotine or kerosene emulsion just after the leaves are well opened will help to eradicate this pest and if the spray is applied say every two weeks in the early part of the season, there should be no trouble on this account.

Viburnums are absolutely hardy and require no winter protection. They may easily be propagated from cuttings rooted in sand or by layering in the usual way. They may also be raised from seed by sowing outdoors in fall or by following the method known as "Stratification". This consists of spreading alternate layers of sand and seeds in some corner of the garden and exposing the whole to the elements during winter. The freezing and thawing assists the germ to break through its hard covering and in spring the germinating seeds may be planted in rows in the open ground in the usual way.

POSITION WANTED

Elderly married man, without children, would like position as caretaker or manager of private summer home in Wisconsin. Many years experience in vegetable growing and landscape work. Expert in keeping everything neat. Efficient in making rustic work. Want year round position with pay sufficient to provide a reasonably good living. Can give best references. Address Caretaker 100, c/o Wisconsin State Horticultural Society, Washington Bldg., Madison, Wis.



Shrubs Attractive at More Than One Season Should be Chosen.
Cuts Courtesy Wis. College of Agriculture

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

NURSERY STOCK—SHRUBS

NURSERY STOCK FOR SALE. American Arbor Vitae, many sizes at reasonable prices. Send for large lists and planting directions. Order early for spring time planting. American Forestry Co., Pembine, Wisconsin.

APPLE SEEDS—Fresh and clean. Will sell while supply lasts at $1.00 per lb. American Forestry Co., Pembine, Wis.

LILY BULBS

REGAL LILIES. Nice blooming bulbs $2.00 per doz. Extra large size $3.25 per doz. Post paid. H. C. Christensen, 1625 Ninth St., Oshkosh, Wis.

WATER LILIES, ORNAMENTAL Water Plants, Berry-bearing shrubs and Plants for attracting birds, etc. Write Terrell's Aquatic Farm, 1006 W. Blk., Oshkosh, Wis.

TREES AND SHRUBS FOR ORNAmental and landscape planting. Write us for lists and prices. American Forestry Co., Pembine, Wisconsin.

OUR CHICKS PAY

LEEREMAN'S
Quality Accredited
HICKS
Are Money Makers. Place your order with us and decide for yourself.
CLEEREMAN'S HATCHERY
Green Bay, Wis. R2J
Life Member W. S. H. S.

FLOWERS AT THE CHICAGO WORLD'S FAIR

Worlds Fair News Item

FLOWERS everywhere, growing in progressive bloom from June until December; terraces transformed into hanging gardens like those of Babylon; deft touches, dainty bits of gem-like beauty alternating with great masses and orderly rows of satisfying continuity; great open air gardens of temperate zone blooms and gorgeous tropical displays under glass; promenades lined with flowers and shrubs, mirrored in the water courses; such are the plans of the Centennial Trustees for floral display at the 1933 World's Fair.

Though not generally known, this Mid-West region centering at Chicago, is one of the greatest producers of flowers in the world. At Mr. Paul Battey's home at Glencoe, Ill., fifteen acres are devoted to peonies. And in season there are millions of blooms.

The greatest rose conservatory in the world is within thirty miles of Chicago. Gorgeous flowers native to far away lands have been acclimated here and blooms finer than the originals are being produced.

Garden and flower clubs; horticultural and floricultural clubs and organizations, and individuals, will all be invited to cooperate with plans that will make the World's Fair grounds the most beautiful floral spot in the world.

"We will be dealing with great multitudes of people", says Mr. Bennett of the Architectural Commission "and therefore must have great expanses of flowers to create a mass impression.

"Likewise we must have the dainty, exquisite touches. We also propose to get away from the conventional squares, rectangles, and curves, by laying out lozenge shaped beds, irregular triangles, and the like.

"Most architects approach their problems with some of the heart of the painter. Our plans stimulate a sense of color harmonies, and we propose an ensemble that will be the joy of the aquerellist."

Further conference with the South Park Commissioners will determine the large space where the great masses of flowers will be planted to produce a magnificent profusion of bloom throughout the Centennial Celebration.

Considerable space surrounding the Horticultural Building will naturally and properly be devoted to flowers. But there may be an additional large space.

The Centennial Trustees plan mechanical transportation between the World's Fair grounds and the enlarged Art Institute, where the great collection of masterpieces will be housed.

This will cause perhaps millions of people to traverse the southern end of Grant Park. Subject to the approval of the South Park Commissioners a large section of Grant Park south of the Buckingham fountain will be utilized.

Such an area is almost imperatively necessary. For, as Mr. Battey pointed out, it will be necessary to plant many of the flowers two or even three years before 1933, to assure mature growth.

Each of the World's Fair buildings will be of two or more stories, stepped back and terraced. These terraces will be flanked and overhanging with flowers and vines, like those of ancient Babylon.

The profusion of water courses, pools, and lagoons throughout the grounds will provide a profusion of mirrors to reflect the colors of the rainbow in the "smiles of God", as some poet has described flowers.

Stretching from the early roses and daffodils of spring, through iris, peonies, lilacs, gladiolas, dahlias, carnations, the multitude of summer flowers, the gamut of beauty and fragrance will terminate with the asters and hardy chrysanthemums that blaze defiance to winter.

Officer—"Say, didn't you see that stop light?"

College Boy—"Sure, but I didn't see you."

TABLE OF CONTENTS

	Page
Door County Fruit Growers Union	291
Iris—Varieties and Culture	293
Dahlias—History and Culture	295
Cranberry Growers Annual Meeting	296
North Dakota News	297
The Apple Maggot	298
Results with Fertilizers on Strawberries and Raspberries	299
Operating a Spray Ring	300
How to Use Annuals	302
State Potato Growers Unite	303
Annual Meeting at Sturgeon Bay	304
Northern Wisconsin Strawberry and Raspberry Day	304
Plant Premium Donations for State Garden and Flower Show	305
Strawberry Day at Warrens	305
About the Home and Garden	306
Save Flowers of State	307
Garden Club Federation News	308
The Garden and Flower Show	308
Water Gardens	309
Roses—Varieties and Culture	312
Growing Roses	313
Among Our County Agents	313
The Use of Paper Mulch	313
Strawberry Mosaic	314
Pruning Demonstrations Popular	315
Viburnums—Cultivation and Care	317
Flowers at Chicago World's Fair	318

Headquarters for
Potato Sprayers and Dusters
Dust and Spray Materials

Calcium Arsenate
Bordeau Mixture
Nicotine Dust
Bordeau Dust

Orchard Harvesting Equipment

Ladders
Picking Bags
Small Baskets

F. R. GIFFORD CO.
2201 University Ave.
Madison, Wis.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

INDEX TO ADVERTISERS

	Page
Albrights Nursery	290
American Forestry Co.	318
Chequamegon Gardens	319
Christensen, H. C.	318
Cleeremans Hatchery	318
Cream City Chemical Co.	320
Cumberland Fruit Pkg. Co.	290
Dewalt's Gardens	290
Fitchett Dahlia Gardens	290
Gifford, F. R.	319
Hauser, J. F.	319
Kniskern, S.	290
Rasmussen's Nurseries	290
Risson's Peonies	320
Stonecrest Gardens	290
Terrell's Aquatic Farms	318
Toole, W. A.	320
White Elm Nursery	290

Advertise in Wisconsin Horticulture

HAVE YOUR MESSAGE READ IN 3,000 HOMES INTERESTED IN HORTICULTURE

Try Our Special Selected Sweet Scented Hybrid Lupines

One Dozen $3.90 post paid

We specialize in Perennials

Send for our new illustrated Catalog

Chequamegon Flower Gardens

V. E. Brubaker, Prop.
Washburn, Wis.

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which describes dainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

ORDER NOW
Cream City Spray Materials

Lime Sulphur
(Liquid and Dry)
Arsenate of Lead
Calcium Arsenate
Bordeaux Mixture
(Paste and Dry)
Potato Special
Corrosive Sublimate
Formaldehyde
Cabbage Special
(Maggot Killer)
Black Leaf 40
Nicotine Dust
Weed Killer

Products of

Cream City Chemical Works

766–774 Kinnickinnic Ave., Milwaukee, Wis.
Phone Hanover 1117

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

Vol. XIX JULY, 1929 No. 11

EVERGREENS

All kinds of trees and Evergreens for sale at reasonable prices.

Write for prices.

S. KNISKERN
Middle Inlet, Wisconsin

Peonies—Gladiolus
Perennials

Walter F. Miller
Sun Prairie, Wis.

BARGAINS

100 finest Gladiolus Bulbs $2.00 F. O. B. or $2.25 postpaid, 10 varieties 10 each. Spring delivery.

30 popular Iris roots, 5 each 6 kinds for $2.25. Postpaid April—July—August delivery.

6 Peony roots, 2 red, 2 white, 2 pink for $3.00 postpaid. Sept.—Oct. delivery.

STONECREST GARDENS
Eau Claire, Wis.

Send for catalog. It's free.

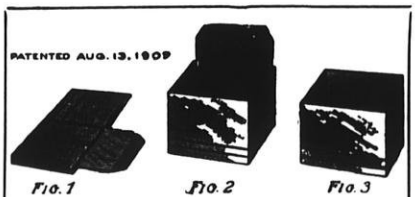


Fig. 1 Fig. 2 Fig. 3

Berry Boxes

Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company

Dept. D, Cumberland, Wis.

White Elm Nursery Co.
Hartland, Wisconsin

General Line of
Ornamentals and Fruits

Dahlias—Gladiolus—Perennials

4 good Dahlias (named, labeled)	$.75
100 Gladiolus (1 inch, assorted)	1.00
1 doz. perennials (assorted, labeled)	1.25
Or, entire list above, postpaid for	2.25

May we send you our price list?

DEWALT'S FLAMBEAU RIVER GARDENS
Ladysmith, Wisconsin

An Invitation

Pay us a visit this Summer, while our garden beauties are at their best. You will enjoy a few hours among the Trees, Shrubs, and Flowers growing in our nurseries. And the selection is more complete and better than ever this season.

RASMUSSEN'S
FRUIT FARM AND NURSERIES
Oshkosh Wisconsin
On Highway 21

Mr. and Mrs. J. T. Fitchett

invite you to visit the

Fitchett Dahlia Gardens

735 Milton Avenue

Janesville, Wisconsin

"At Home"
from August the fifteenth until frost

Wisconsin Horticulture

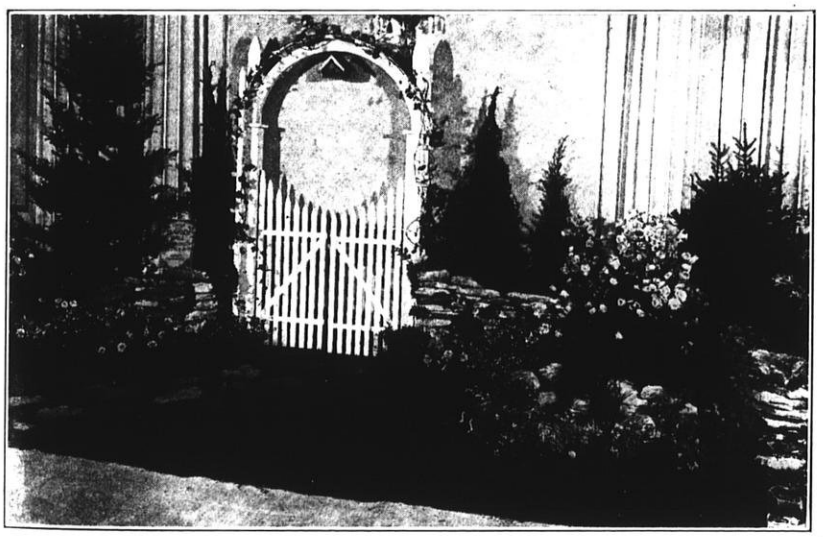
Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS
President
C. J. Telfer, Green Bay
Vice-President
M. B. Goff, Sturgeon Bay
Secretary
H. J. Rahmlow, Madison

First State Garden and Flower Show Decided Success

HAD more of the garden and flower lovers of Wisconsin realized what the State Show held at the Loraine Hotel was like, twice as many would have attended. The most common expression heard at the show was "Why, I never thought it would be anything like this!"



"OVER THE GARDEN WALL."
First prize garden, by Madison Garden Club, Ladies Committee.

We need not say here that the show was a success, but we do want to say that the cooperation and willingness to help on the part of all the exhibitors and committees connected with the show was splendid. Only true gardeners and flower lovers could so unselfishly have put such an undertaking across without compensation.

The gardens were wonderful as were all the garden club projects. The Iris show was of high quality but exhibits not as numerous as expected.

It was a little early for peonies but there was a nice exhibit of these and also perennials and roses.

Every shadow box, twenty-four of them, was filled. All of them showed real taste and ability. The luncheon tables drew a steady stream of admirers, as they demonstrated skill and taste.

The miniature gardens, while few in number, were splendidly done, as were also the window boxes.

The commercial gardens were the outstanding feature of the show. Considerable credit is due each of the concerns exhibiting. The Swartz Nursery of Kenosha, the White Elm Nursery of Hartland, and W. A. Toole of Baraboo came a considerable distance, which means expense, to put up their gardens. They had no assurance that there would be a large crowd, at least from their territory, or that they would be repaid for their efforts. They did it to help a good cause, and promote interest in gardening in Wisconsin.

The help of the three Madison nurseries was also appreciated. They were the Anderson Nursery, the Flowerwood Nursery owned by Louis Hanson, and the Schmidt Nursery and Landscape Service. These six gardens just rounded out the show and together with the "Little Gardens," the Indian Scene by Burdick and Murray of Madison, the center fountain designed by Miss Charlotte Peabody, the display of cut flowers

by the Lake Geneva Gardeners and Foremans Association, filled the ball room nicely.

Loraine Hotel Deserves Credit

The Loraine Hotel management deserves the thanks of the Federation for their cooperation. Not a cent was charged for the use of the rooms, lights or cooling the rooms. We were given anything we wanted, and the spirit of friendliness and cooperation shown by everyone in the hotel, from Manager Fitzgerald to the bell boys could not have been improved.

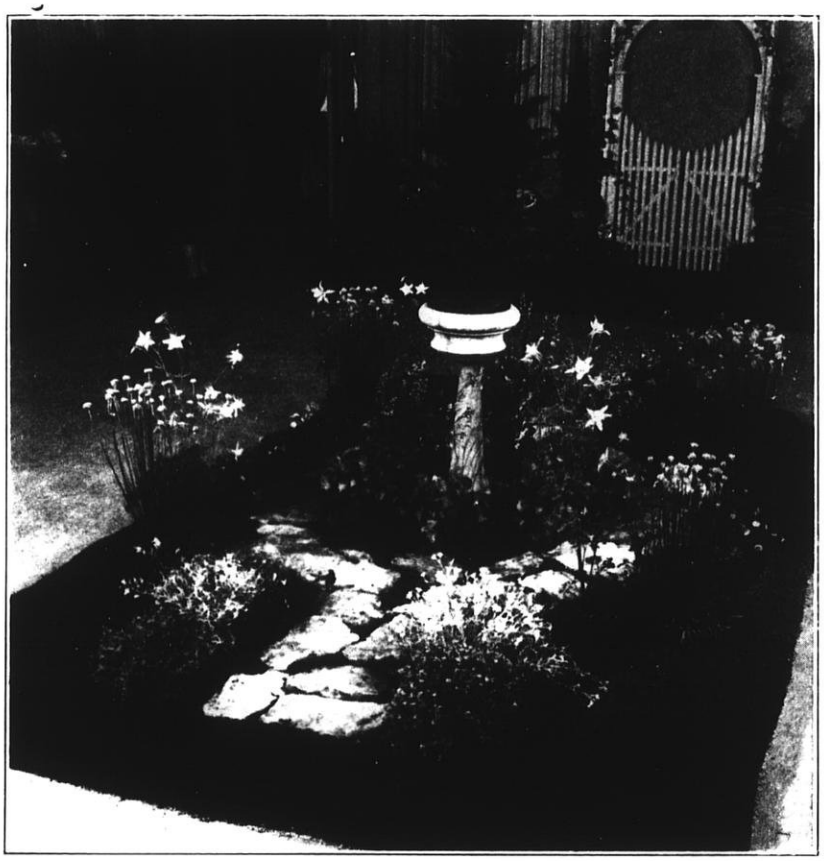
We will attempt to describe the exhibits in the order in which they appeared as one came up the stairway and entered the ball room from the mezzanine floor.

The State Exhibits

At the head of the stairway was a very fine exhibit put up jointly by the State Department of Agriculture and the State Conservation Commission consisting of a woodland scene of evergreens and wild flowers representing a natural forest setting with a sign calling attention to the fact that the transportation of plants is prohibited without a permit. The exhibit was beautified by a number of moccasin flowers, cypripedium and other wild flowers.

A stone wall at one end of this exhibit separated it from a flower garden put up by the State Department of Agriculture, Entomology Division. This booth featured natural clumps of iris, gladiolus, roses, snapdragons, peonies and trees illustrating the various diseases of ornamental plants.

It was laid out as a flower garden with a flag stone walk through the center. The diseases explained were Rot of Glads, European Elm Scale, Root Knot, Aphis injury on Evergreens, Rose Mildew, Iris borer and leaf root, snapdragon rust, red spider injury on evergreens, oyster shell scale on mountain ash and tortoise shell scale on mugho pines. A low spruce hedge framed the exhibit.



"A GARDEN PATH."
By Madison Garden Club, Men's Committee. Third prize.

Both of these exhibits were built by Mr. Noel Thompson, assisted by Mr. E. P. Breakey of the Department of Entomology. Much credit is due to these men and the Department for their work and cooperation. Mr. E. L. Chambers, head of the Department and Mr. C. D. Adams also helped explain the plant troubles and their cure to many interested gardeners during the show. This was the leading educational exhibit of the show.

Entering the ball room, the first exhibit was the rock garden by the committee of the Milwaukee Horticultural Society, Mrs. O. J. Reuss of Wauwatosa Chairman. It consisted of a background of spruce and arbor vitae with a rock border and rock pool in which were growing iris and a beautiful wild calla lily. Many rock garden plants gave the exhibit a natural rock garden effect. This exhibit won honorable mention.

The next exhibit was put on by Burdick and Murray Company, Madison, representing a group of Indians gazing at a spirit stone in a natural forest setting of pine and spruce trees, stumps, logs and wild flowers.

The exhibit was designed by Mr. Fred Bodenstein of Madison and by Mr. Art Knisely of the Company. The legend was that the Indians had a vision revealed to them of what the white man would accomplish within the next 100 years.

In the center space opposite the above was a beautiful little rose garden the title of which was "My Rosarie." The roses in this garden were wonderful. A little trellis at one end of the garden was covered with Baby Ramblers in full bloom. The

"THE JUNE BRIDE."
Exhibited by the Rentschler Floral Co. and Manchesters of Madison.

garden was lined with an edging of Spirea Anthony Waterer, Spirea Neyron Roses, Dorothy Perkins, Claudius Der Pirnet, Edith Carrill rambler and a beautiful Magna Charta in full bloom.

Eschrich's Nursery of Milwaukee sent an exhibit of evergreens consisting of pyramid and globe arbor vitae, pfitzers Juniper and Blue and Mugho pine. The specimens were very fine and attractively filled one corner of the room.

The Rustic Garden Furniture Works of Janesville, Mr. L. C. Herreid Proprietor, exhibited some lawn furniture consisting of fernery, bird bath and stump bench which were very attractive.

The next exhibit was a perennial garden by the Anderson Nursery Company of Madison. This represented a perennial border. In the background were spruce and pine with iris and other very beautiful perennials in full bloom and forming a curved border were coral bells, oriental poppies and pyrethrum, English daisies and other beautiful perennials in bloom. An edging of grass and a bird bath completed the picture. The Anderson Nursery specializes in perennials and put up a very fine exhibit.

Rock Garden Featured

One of the big features of the show was the rock garden built by the White Elm Nursery of Hartland. It excelled anything we have seen at any show. A background of large pine and spruce trees formed a setting and a rock pool with running water the main attraction. Low mugho pine and Junipers formed the front edge, while among the many rocks were at least twenty varieties of rock garden plants in full bloom. A large crowd was continually asking the attendants, Mr. W. A. Dustrude and Mr. Donald Ralph, questions as to the names of the varieties and their characteristics.

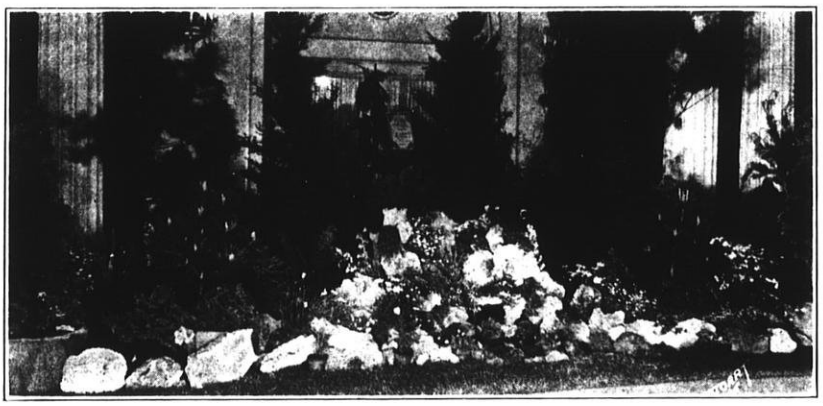
Next was a formal garden by the Schmidt Nursery and Landscape Service of Madison. A pergola formed the background surrounded by arbor vitae and spruce. In the foreground were perennials and a bird bath in formal design. The pool was surrounded by spirea. Many beautiful perennials in full bloom were exhibited. Mr. Schmidt was kept busy answering questions as to the names of the different varieties. As there is considerable interest in formal gardens this exhibit was especially appropriate.

The Madison Garden Club exhibited a miniature park arranged by Mr. Fred Bodenstein. It represented a little park the Garden Club is sponsoring on the west side of Madison. The

WILD FLOWER GARDEN.
Exhibited by W. A. Toole of Baraboo.

main feature was an old rail fence forming the background.

The Hillcrest Garden Club of West Allis exhibited a little garden entitled "Bird Retreat," which was the next garden along the wall. The background of spruce, both large and small, was beautifully arranged and made an ideal retreat for our feathered friends. The bird bath, nicely set between spruce and iris clumps in bloom, completed the picture. The foreground represented a grass lawn on which a nicely mounted blue jay was seen feeding on sun flower seed near the spruce in the background. This exhibit won second prize in the little gardens.



A ROCK POOL.
By the Swartz Nursery Co. of Kenosha.

The First Prize Garden

The first prize on "Little Gardens" was next. The title of this was "Over the Garden Wall," by the Ladies' Committee of the Madison Garden Club.

There was considerable rivalry between the ladies' and mens' committee of the club and great was the excitement when the ladies won first. It was indeed a beautiful garden. In the background was a gate covered with vines. A rock wall formed the back and one side of the garden, while a gently curved flagstone path led to the gate. On each side of the gate back of the stone wall were spruce trees and in front a perennial border of petunias, canterbury bells and other perennials. At the right side was a little pool surrounded by rocks and plants which formed a miniature rock garden.

In the center of the floor was the garden of the men's committee of the Madison Garden Club, the title of which was a "Garden Path." This was also a very beautiful exhibit. In the center of the garden was a sun dial surrounded by a curved flagstone path. Surrounding the path which was in formal design were massed beautiful perennials. The entire garden was surrounded by coral bells, columbine and English daisies. There were some most beautiful perennials in the garden.

W. A. Toole, Garry-nee-Dule, of Baraboo exhibited a wonderful wild flower garden. This also rivalled anything we have seen at other shows. A dense background of pine, spruce and hemlock interspersed by many varieties of wild flowers formed the setting. A stream of water trickling over rocks gave a very natural effect. Among the wild flowers in the garden were several species of lady slipper, shooting star, columbine, pitcher plant, wild fern and other flowers. Moss formed the floor of the forest making it indeed a natural forest picture.

Both Mr. Toole and Mr. Vaughan S. Conway his assistant were kept busy answering questions about the wild flower plants in which Mr. Toole is especially interested.

The Swartz Nursery of Kenosha deserves a great deal of credit for their wonderful exhibit entitled a "Rock Pool." It consisted of a background of tall pines and spruce while in the foreground were arbor vitae and dwarfed pine. The rocks used to form the pool were real tufa among which were growing many varieties of rock garden plants. The foreground was lined with grass forming a lawn. Ferns were also growing among the rocks.

Mr. Harold Swartz was in attendance and answered many questions in regard to building a rock garden and varieties of plants suitable for this popular type of garden.

The next exhibit was put on by the Flowerwood Nursery, Mr. Louis Hanson of Madison proprietor, entitled the "Garden Retreat." It consisted of a background of pine and spruce while in the foreground was a rock garden in which were growing Junipers and perennials the most beautiful of which were several clumps of lupine, columbine and pyrethrum. The Cistena plum, a new plant with red foliage, was also used. Both Mr. and Mrs. Hanson were in constant attendance answering questions as to varieties and design of gardens, making this indeed a real educational show.

In the center of the room was a large fountain designed by Miss Charlotte Peabody, landscape architect. It consisted of a circular pool surrounded by stones very carefully cut to make an exact circle and surrounded by a number of varieties of perennials. The column of water coming from the fountains rose to a height of eight feet and the sound of the falling water was very pleasing.

Adjacent to this fountain was a very beautiful display of cut flowers brought by the Lake

(Continued on page 342)

Strawberry Day at Warrens

Meeting Well Attended. Many Interesting Pointers on Diseases, Fertilizers, Marketing and Cultural Methods Brought Out

THE weather man smiled on the Warrens meeting on June 15. Perfect is the only term by which we can describe it. As a result about 160 people attended, although sometimes perfect weather in summer makes the farmer feel like staying home to do important work.

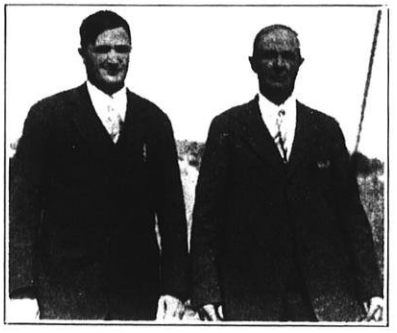
Cool weather had delayed the berry crop and only a few were ripe. At the time of setting the date some growers were positive they would be shipping carload lots by June 15th. It just goes to show we must have just so much good and so much bad weather to make a season, and the ripening period wasn't so much different from last year.

Mr. Rex Eberdt, manager of the Warrens Fruit Growers Association, opened the meeting and called on Mr. A. W. Pommerening of the Bureau of Markets for the first talk.

Mr. Pommerening emphasized the importance of grades and standards in marketing. He complimented the Warrens Association for the quality of their graded stock during the past seasons, which resulted in good prices, a good reputation and demand for the fruit.

He called attention to the low prices of southern berries on the northern markets during May and early June. One of the reasons for low prices was poor quality—many cases grading out about 45% of junk. This brought the price to the housewife up to about 50¢ per quart for what was actually fit for food, though the price was only about 15¢ per quart.

Mr. Rex Eberdt, who acted as chairman of the meeting, talked for a few minutes on marketing and the value of a quality pack. Berries picked in the cool of the morning and kept cool have that luster which overcomes competition.



E. W. Sullivan of Alma Center, and son Hollis, of Taylor, pioneer strawberry growers. They invited the Society to hold next years meeting at Alma Center. The invitation was accepted.

The Warrens growers believe in grading and will put up a quality pack again this year.

Mr. R. K. Froker of the Economics Department of the College of Agriculture talked on the present trend of marketing and the progress of cooperating.

The chain store, while being opposed by home merchants is evidently here to stay. Not only that, but many privately owned stores and even banks are organizing chain systems.

Farmers will therefore have to study the methods of the chain store in order to be able to furnish what the system wants. If farmers through their organizations can do this it will eliminate a lot of expensive handling before the product reaches the consumer. Farmer organizations can sell directly to the retail chain store system which seems to be what we are coming to in the very essential program of more direct marketing.

Mr. J. E. Leverich of Sparta spoke for the Sparta growers. He told of the many varieties of berries which have been grown in this section during the past generation. He predicted that growers would not discard the old Warfield and Dunlap for some time. He praised the Beaver and next to it the Premier. Oshkosh seems to be promising but cannot be recommended until further trial.

Should Have Trial Bed

He stated each grower should have a trial bed to try out new varieties under his conditions. No variety can be said to be perfect for every locality.

A statement of the cost of growing a crate of berries would be interesting for the next meeting in the opinion of Mr. Leverich. We hope some of our growers can furnish this for the 1930 "Strawberry Day"

He is not in favor of compulsory grading of strawberries, especially since Wisconsin is the last state to harvest them. Two or three grades are sufficient and whether or not they be used should be left to each community.

Prof. A. S. Colby of the Illinois College of Agriculture was the main speaker of the meeting.

Lack of drainage and poor location is the cause of poor crops in many sections.

Strawberries are shallow rooted and cannot stand too much water in spring or drought in summer.

Humus is necessary especially so the soil will hold water and not dry out.

Commercial fertilizers are coming into use and different soils require different handling. Farmers should try out various amounts of different kinds of fertilizers to see what is needed in their soils.

A man at each shipping point to grade the berries was found necessary to get good quality and good prices in Illinois sections.

Varieties also vary a great deal as to their requirements.

and growers should try out several kinds to see which is the best. The Beaver is of interest to Illinois growers and is being tried out.

The Warfield is not being grown in Illinois on account of Leaf Spot.

Strawberries are also sprayed each spring for the leaf roller.

Fertilizers for Small Fruits

Secretary H. J. Rahmlow spoke briefly on fertilizers for strawberries and raspberries. Little work has been done along this line, and a Michigan experiment was referred to.

According to this test, which was on sandy soil, nitrate fertilizers gave the best results on both fruits. Either Ammonium sulphate or Nitrate of soda may be used. Phosphate seems to give results on strawberries but neither potash nor phosphates have shown results on raspberries. In this respect they seem to be like apple trees.

Split applications, spring and late summer also gave the best results.

The State Horticultural Society was asked by those at the meeting to send some fertilizer to farms at Alma Center and Taylor, these plots to be visited on the tour next year.

Alma Center Chosen for Next Meeting

Mr. E. W. Sullivan of Alma Center and his son Hollis of Taylor invited the Society to hold the next state meeting in their section. A large majority of those present voted to accept the invitation.

An effort will therefore be made by the Horticultural Society cooperating with several growers, to have some fertilizer tests at these points.

The Tour

Following a fine strawberry shortcake dinner, served by the Woman's Mission Circle, County Agent Kuenning of Monroe County started the tour of berry fields. Mr. Kuenning handled the crowd with marked ability. Many points of interest were repeated so all could hear, and every minute was filled with something of value.

C. H. Beaver, of Eau Claire, originator of the Beaver strawberry. Mr. Beaver attended the meetings and gave valuable pointers on Strawberry grow .

State Entomologist, E. L. Chambers, and R. E. Vaughan of the Pathology Department were present to talk on diseases found in the field.

Wrong Fertilizer Used

The first stop was on the farm of Ernest Gilson who has a good field of Beaver strawberries on new breaking. He plowed under buckwheat and used 0-10-10 fertilizer. The opinion of those present was that a nitrogen fertilizer was needed as the foliage was a little pale and lacked size.

As an 0-10-10 fertilizer contains no nitrogen this shows how a farmer can lose by not putting on the right plant food, and indicates the value of tests along this line.

Mr. Gilson's soil is sandy and showed good handling and care.

The second stop was on the farm of Lou West who has five acres of strawberries. Part of the field was on low ground which Mr. West said held back the berries in the spring. Prof. A. S. Colby, however, was of the opinion that low ground is often dangerous due to frost and poor drainage.

Mr. West had tried putting strawberries on the same soil twice in succession, but said he would never do it again.

The third stop was on the farm of John Olson who has a large field of blackberries. There had been considerable winter killing on part of the field.

Pruning Blackberries

Prof. A. S. Colby at this point told about pruning blackberries. When about three feet high the tips are pinched off so that lateral branches are thrown out, resulting in more fruit. He stated this is not done with red raspberries as it induces suckering, or throwing out too many new shoots from the roots.

The next stop was on the farm of Dr. J. G. Seidel who has several acres of Premiers in good condition; but, like a number of other fields, had been hit by hail.

Buckwheat had been plowed under and some nitrate fertilizer used and the foliage here was better than in some of the fields seen.

Raspberry Diseases Discussed

Mosaic of raspberries was pointed out at this stop by R. E. Vaughan and E. L. Chambers. It is hard to detect, and the cause is unknown, but it will ruin the productivity of a patch if it gets bad. Dr. Seidel's field was quite free from the disease.

Mosaic has been suspected on strawberries, but is quite rare. Growers were asked to notify the Pathology Department if suspicious plants are found.

Cane borer was found by Mr. Chambers who recommended that all plants wilting by the borer be burned.

White grubs are bad if berries are planted on old sod. June bugs are numerous this year, so clean up rubbish to keep out the eggs, was the advice given. Clover or alfalfa do not attract bugs as does Timothy sod.

Cane and twig blight is getting quite common, and raspberries should be sprayed with lime sulfur, one part to nine parts water, before the leaves show in spring.

New Breaking Unfit for Strawberries

The next stop was on the farm of Mr. E. Wildes. Strawberries had been planted on new breaking as the first crop, but Mr. Wildes felt a crop of potatoes would have left the soil in better condition for berries.

On the farm of Everett Stoddard, buckwheat had been ploughed under on part of the field and the balance was manured. Results could not be seen definitely as yet.

The last stop was on the farm of H. H. Harris & Son, pioneer growers in the Warrens section. Here what may be called a small experiment station is being conducted.

Strawberry Variety Test

The varieties grown are: Dunlap, Warfield, Oshkosh, Beaver, Premier, Reynolds Special and several other early varieties. Of the everbearing, Progressive, Champion, and Mastodon are grown.

The Oshkosh, a new variety, looked very good, while Premier also does well. The latter is adopted to fertile soils as it does not set runners as freely as Beaver, which seems best for sandy siols, not high in fertility.

Mastodon does not bear as heavily as Champion or Progressive in the everbearing class, but the berries are larger.

The use of acid Phosphate, according to Mr. Harris, gives a firmer berry. The results of his fertilizer trials will be reported later.

There were 45 autos in the tour containing about 140 interested growers. A great deal of good information and exchange of ideas comes out of these meetings and no doubt they will grow.

THE BAYFIELD MEETING

ONE of the most beautiful views of a lake and islands in the state may be seen at Bayfield.

The small fruit meeting held there was quite successful, over 50 growers attending. Our Vice-president, M. B. Goff of Sturgeon Bay, was the principal speaker. He told of the work in cooperative marketing in Door County, which fruit gowers consider their greatest opportunity for future success in fruit growing.

Other speakers were Geo. Briggs, County Agent Leader, who chose as his topic "Observation", and how we learn by so doing. H. J. Rahmlow told of experiments and results with fertilizer, especially nitrates, at other places. Mr. Glenn Scott, editor of the Bayfield Press told of the opportunities he felt were available in the Bayfield section. Harvey Nourse told of experiences in growing strawberries at Bayfield. County Agent Holvenstot gave his observations in fruit growing in the county.

The tour in the afternoon was very interesting. Strawberry and raspberry fields and cherry orchards were inspected. Perhaps the outstanding point of discussion was on fertilizers. There was considerable indication of lack of vigor in both raspberries and strawberries. A nitrate fertilizer would no doubt increase the crop a great deal. Fertilizer tests in this section will be of value.

The Marlboro raspberry is being grown a great deal, though there is interest in the Latham. The latter has more vigorous growing canes. There was some winter killing in cherry orchards, the cause of which was not plain. Mr. Goff stated that a clay subsoil was liable to retain moisture and result in trees being short lived.

Shot hole fungus may be the reason for much winter killing. It is known that an attack of the fungus two years in succession injures the tree and usually results in the trees dying. A careful spray program is very essential in growing the cherry crop.

The Bayfield section has the soil, the climate, the market and the people to grow small fruits. What is needed is more information on fertilizers, varieties and cultural practices.

THE SMALL FRUIT MEETING AT MENOMONIE

A VERY intersting small fruit meeting was held at Menomonie June 14 in cooperation with the Dunn County Fruit Growers Association. Superintendent D. P. Hughes of the County Agricultural School helped arrange the details of the meeting and tour.

What the crowd lacked in size they made up in interest. The program was very interesting. This meeting was arranged to come the day preceding the Warrens meeting and the same speakers appeared at both places. The forenoon program, therefore, was much the same as at Warrens which will be found in another column.

In the afternoon a very instructive tour was made to nearby berry farms. We were impressed with the high quality of the soil in this section which gives a very vigorous stand of both raspberries and strawberries. Many raspberry canes were six and seven feet high, and should bear a big crop.

The first stop was at the farm of Frank Kelley who specializes in Guernsey cows, Latham raspberries, Dunlap and Warfield strawberries. All crops were in vigorous condition, showing the use of plenty of manure.

There was a discussion at this point on pruning and winter covering for raspberries. As the canes were about six feet or over, they no doubt bend over under a load, and Minnesota experiments were cited showing that pruning to four or five feet gave good results.

(Continued on page 348)

Dahlia Diseases and Insect Control

W. H. TIMM
Milwaukee Society

THE Dahlia at present has no serious disease or pest to contend with. It is true that there are certain pests which prey upon them but these vary in different sections, and there is no one pest that is really epidemic.

Cutworms

Cutworms usually cause the grower a little worry, but they are no worse on the Dahlia than on many other plants; in fact, if the Dahlia is not planted out until June, or is not above ground until that time, most of the cutworms will, in an ordinary season, have pupated and completed their ravages for the Summer. In sections where they are very bad, it is wise to take some precautions against them, especially if you are using young plants. If a shoot from a tuber is cut off by a cutworm, it will soon sprout again, but if a young plant is cut off it may come away again, but is suffers such a severe check that it never seems to recover completely.

So where expensive new plants are being used and where there are cutworms, it is best to protect them. This is best done by making little cardboard or tin collars to go around each plant. They should be put in place as soon as the plants are set out, for the cutworms will usually attack them the first night; and it usually picks out the most valuable first.

A mixture of paris green and bran, laid down as a poisoned bait, will very often get rid of a lot of the worms.

White Grubs

In some sections the large white grub, which is the larva of the May and June beetle and which does so much damage to lawns and golf courses, is very bad. He is a voracious feeder and lives for several years, eating roots of all kinds of plants. There are certain varieties of Dahlia of which he is very fond, and often, when a plant is not doing well and the stock is blamed for being unhealthy, if the roots are examined it will be found that they are being constantly nibbled by this pernicious grub. If it is very troublesome, the ground should be treated before planting time with a weak solution of cyanide of soda, one ounce to 25 gallons of water.

Clean cultivation, spading up the soil in the Fall so as to leave it rough all Winter, and allowing the birds to get at the grubs will do much to keep them down. They are usually much more troublesome in a soil that has been newly broken up after a period in sod, so such a soil must be carefully watched.

Stem Borers

Fortunately we do not have the European borer in this section, but we have the stem borer which is more general and which at times gives serious trouble. I do not know of any real remedy for this pest. We do not even know he is present until most of the damage is done. The best thing to do is to watch the plants very carefully, and whenever there are any signs of his working, dig him out and put an end to him. The plant usually recovers, and as the borer is at its worst for only about a month, it can be controlled. Its presence is indicated by the wilting of a portion of the plant it has been working on. As soon as a plant shows this condition, a vigorous search should be made; the borer will usually be found boring his way up or down in the stem. A portion of the stem should then be cut away until the insect is found. If the plant is in a serious condition, special care should be given it for a time in the way of watering, etc., until it recovers. This pest is found in other herbaceous stems besides those of the Dahlia, and much can be done to keep it down by clean cultivation of all surroundings. All weeds and plants with hollow stems should be cut down in the Fall and destroyed by burning, when a lot of eggs of various injurious insects will be destroyed.

Aphis, or Green Fly

The green fly or aphis is sometimes troublesome, especially when plants are young, but this pest is so easy to control that there should be no excuse for it. Any contact spray or a dusting with a tobacco powder will soon eliminate it.

Red Spider

This pest is usually more troublesome in dry weather; it can be gotten rid of by dusting with superfine dusting sulphur.

Thrips

It is my candid opinion that the worst insect we have to contend with, and the one that first causes the stunted condition of the Dahlia is thrips. This is a minute insect hardly to be seen with the naked eye, and can never be detected unless looked for, as it works in the folded bud of the growing points of the shoot. In warm weather the eggs of this insect hatch out in about ten days. The very tiny white larvae feed in colonies for a period of from ten to twenty days, doing a great deal of damage by sucking the juice out of the young undeveloped leaves and the tender growing point. These larvae then enter a pupal stage, which lasts only about six days when the adults emerge, also doing a lot of damage by sucking

(Continued on page 346)

Pruning Dahlias

DR. H. NOLTE
Milwaukee Society

IN PRUNING dahlias always keep the symmetry of the plant in mind. If you want a lot of flowers don't prune too much, only enough to keep up a free circulation of air about the plants; but if you want large sized flowers, prune and disbud quite freely.

In case of pompoms, peony flowers or single, collerettes, and Princess Cecelia do only a little pruning and cut flowers when wanted or as soon as they fade. This will give the other buds a better chance to develop into flowers.

After the plant reaches a height of a foot or more, begin to tie it to a stake and continue to do this as the plant grows taller. Always use raffia or burlap string as this will not cut into the stem.

As soon as the plant shows side shoots or laterals I pinch off the first three lower sets. The fourth set I leave stand and remove alterating shoots above these.

If the central bud shows too early, say before the 15th of August, I pinch off that bud and also the first set of laterals immediately below it; for allowing them to grow they also will show buds and flower just when the sun's rays are hottest and they will wilt on the plant in a day or two. After this procedure the laterals will start to grow. I always leave the first lowest set of sublaterals stand and pinch out most of the other sublateral shoots or all if an extra large long stemmed flower is wanted.

As almost all buds come in threes always try to pinch off the outer ones for this will give the central bud a more erect flower. Tie all large flowering stems separately and loosely to stake to prevent them from breaking off on a windy day.

After the 15th of September remove all dry leaves, extra shoots that are weak and all foliage that is superfluous and then let them grow wild more or less and merely keep on disbudding as soon as the buds appear.

In cutting the flowers try to get as long a stem as possible, cutting about one inch above the first lowest set of sublaterals and always cut slantingly, having the upper end of the cut at least one inch longer than the lower cut surface. This will act as an awning and will prevent the rain from getting into the hollow stem which may eventually cause the tuber to rot.

Always cut the flower early in the morning when the dew is still on it. Remove most of the foliage and immediately put the stem in cold water. Then place them in a cool dark cellar away from a draught and let them draw water for at least six to eight hours. Line a large box with waxed tissue paper put in the flowers and cover with another layer of waxed paper. As soon as the flowers arrive at their destination cut the stem back one inch, and put into cool fresh water. Some people use a pinch of salt, some a little ammonia, while others put an aspirin tablet into the water to keep them from wilting.

Dahlias need plenty of air, sunshine, rich soil and mulching during the hot season. In watering them it is best to give them a good soaking once a week and follow this up the next day with cultivation for this is better than a little sprinkling every day which will evaporate before it gets down to the roots.

If you like spinach, a good plant to try next summer would be the New Zealand spinach. It will give you greens over a long season.

ALYSSUM

MR. ARTHUR KRON
Elm Grove

SWEET alyssum is the little white annual we are all familiar with. It is easy to raise from seed, grows in all sorts of soil, blooms six weeks after planting from July to frost. It can be potted for winter.

Alyssum Saxatile—perennial —Gold Tuft. A very prolific small yellow flower blooming in spires forming neat carpets of small fragrant yellow flowers. The leaves are small, slender, and silvery. Plant in a sunny place and sandy soil. Avoid heavy clay. Good for the Rockery. Start seeds indoors in February. Grows about one foot high.

Alyssum Saxatile Compactum —a smaller variety growing only 6 in. high.

Both may be increased by cuttings. Natives of Europe and Asia.

AGERATUM–FLOSS FLOWER

Annual

The common variety of ageratum is a small blue flower growing about 6 or eight inches high. It is easy to grow. Should be planted in full sunlight in any garden soil. If started from seed, sow indoors in February to provide three inch plants by May. A light sandy soil should be used. Temperature of 54 to 56 degrees and full sun is desirable. Cuttings may be made in September and carried over in a cool place in the house for the winter. Take care in watering so they do not damp off. Keep shaded.

There is also a tall variety about 24 inches high. While we are familiar with the blue there is also a white and rose color.

The ageratum is a native of Mexico.

Mistress: "What beautiful scallops you have on your pies, Mandy! How do you do it?"

Cook: "Deed, honey, dey ain't no trouble. I jes' uses my false teeth."

Rose Disease Control

MRS. J. A. REED
Madison Rosarians

ROSE growers have found that the easiest and surest way to combat disease among their roses is to prevent it.

Preventative measures applied early enough will do a great deal more toward healthy roses than all the cures known can do after the bush has become diseased. As a preventative it is wise, as soon as the winter cover has been removed, to spray the plants with Bordeaux Mixture.

Should plants have shown any tendency to black spot, a good sprinkling of Sulfate of Iron placed around the plant over the soil will help prevent a recurrence of the disease. This should be applied in the late fall and will be found very helpful in eliminating it.

So far when the disease has gotten a firm hold there is no known cure. Dr. L. M. Massey, Plant Pathologist of Cornell University, claims it can be eliminated by spraying and dusting at the proper time.

As a control measure all affected leaves should be raked and burned. A spray of Bordeaux mixture is recommended by Dr. Massey.

Edwin M. Rosenbluth of Wallingford, who is a successful rose grower and whose garden is practically free from fungus diseases, says that persistent spraying and carefully collecting and burning all the leaves will do much to eliminate the infection.

A mixture of 90 parts of finely ground sulphur and ten parts of powdered arsenate of lead, dusted upon the plants have proven as efficient as Bordeaux and far less unsightly.

Mildew on Roses

Quoting H. H. Hazelwood in the Rose Annual of 1925, he says, "For a long time rose enthusiasts have been making an effort to reconcile some of the theories as to the cause of mildew with the practical experience of most growers. It is generally considered that the mildew spores are distributed universally in all countries, only awaiting suitable conditions for their growth and development into this well known rose blight."

The conditions conceded by various authorities are (a) sudden changes of temperature in the growing season, (b) moist humid conditions, with consequent soft sappy growth, making the bushes peculiarly susceptible to infection.

Another authority declares mildew is more prevalent and persistent after a long dry spell.

Certainly these theories do not satisfactorily explain the cause.

Many noted growers claim that potash is a powerful resistant of fungus diseases.

Almost every book on agricultural Chemistry and Manuring makes such a statement; therefore, on the strength of those statements many of the well known growers have experimented with sulphate of potash, using varieties, a Dean Hole, Mildred Grant and Penlope varieties known to be peculiarly susceptible to mildew. In every case gratifying results were reported.

One experimentor kept the Dean Hole variety entirely free the entire season by frequently applying a liquid manure made from 1 tablespoonful of Potassium sulphate to four gallons of water. Another experiment gave the owner a perfectly mildewless plant when planted where the wood ashes had been deposited, while in another location the same variety was hopelessly mildewed. For this experiment Francois Dubreuil was used.

Numerous experiments have proven that mildew is more prevalent on sandy soils than on clay, the reason for this seems to be that while the sandy soil is much more easily drained than the clay and is much warmer, it is also more deficient in potash.

Incredible as it may seem, a chemical analysis of some of the soil from gardens producing the best results in the eradication of mildew has shown a 3.79 per cent total of potash, from 10.2 to 10.9 per cent of which was immediately available as a plant food.

While there is no contention that such an amount is necessary to immunity from mildew, the use of potash in considerable quantity and rigidarity of application is worthy of our serious consideration. One of the effects of potash on a plant is to increase its vigor. A vigorous plant is a healthy plant; a vigorous healthy plant is a disease resisting plant.

While each grower must decide how much potassium sulphate his particular soil needs, it is wise to start out with an application of a handful to each plant and watch results. The sandy location will naturally require a greater amount than the heavier clay soil. Growers are beginning to recognize the fact that the ultimate conquest of mildew lies in the proper nourishing of the plant, with particular reference to the potash manuring.

When mildew has developed a frequent dusting with Massey's dust has been recommended. Mildew is less troublesome when the plants are located in the open. Bicarbonate of soda in the proportion of 1 oz. to the gallon has proven of considerable value.

Dr. Sulliger of Kent, Washington, has added washing ammonia to the soda spray. He adds a tablespoonful of ordinary house-hold ammonia to the soda spray. This has proven very efficient in getting rid of aphis. While using the soda and am-

(Continued on page 349)

HORTICULTURAL NEWS

A. F. YEAGER
Secretary North Dakota Horticultural Society

Circular No. 77, U. S. D. A., is entitled "Suggestions for Paper Mulch Trials." If interested, write your Congressman for this circular.

Many plants are showing the effects of plant lice this spring. Do not try to control plant lice with poisons such as lead arsenate. They must be killed with contact sprays such as nicotine solution. The worms which eat the leaves of currants and gooseberries, as well as the worm which makes big webby nests on the chokecherries, may all be controlled by spraying with lead arsenate applied either as a liquid or in the dry form.

Pruning tomatoes usually reduces the total yield per plant but may increase the earliness a bit, improve the quality of the fruit, and permit closer spacing. The usual pruning method is to train the plant to one stem by breaking out the sprouts as they appear on the sides of the main stem in the axils of the leaves. This will keep the plant growing on one stem. Such a plant is supported by being tied to a stake driven down alongside it. If you have trouble in ripening tomatoes, or if your space is limited, I suggest this method.

A friend asks why Flowering Almond (Prunus Triloba) which used to bloom profusely does so no more. We suggested that it was probably a plum tree now. This plant is usually grafted on plum roots, hence if the sprouts are not kept cut they will overgrow the flowering bush.

William Crocker, of the Boyce-Thompson Institute, in the Florists Exchange, reports that one part of illuminating gas in 10,000 parts of air will injure many plants. He suggests the tomato plant as a particularly sensitive one.

In the American Peony Society bulletin, Nellie A. Brown, of the U. S. D. A., reports that rematodes in the roots of peonies can be killed by immersing the roots in hot water at a temperature of 120 degrees F. for 30 minutes. This does not damage the buds.

Some folks have the idea that pumpkins and squashes will mix with muskmelons and spoil their flavor. Careful experiments have shown this to be a myth. A muskmelon cannot be crossed with a squash or pumpkin, through some varieties of squashes and pumpkins will cross with each other. However, even if they do, the crossing will affect only the seed. One cannot tell whether the plants are mixed until the following year.

The Illinois and Virginia Experiment Stations have found that potatoes stored at 36 degrees make better seed potatoes than those stored at a higher or lower temperature.

Experiments at Massachusetts show that Duchess and Wealthy are two apple varieties which work very well as pollenizers for each other. The same Station reports that if nicotine sulphate is added to lead arsenate spray for fruit trees one need not worry about poisoning bees.

What is the Russian Elm? The Russian or Siberian Elm is the same thing as the Chinese Elm. The behavior of these trees is something of a puzzle under some conditions. Some places in the state they show great promise.

In watering plants, rain water is always safest to use if you can get it. Experiments at the Kansas Experiment Station have shown that artificial softening of hard water does not benefit it for use on plants. In fact, it is more likely to be dangerous than before giving treatment.

CLEARING HOUSE SUGGESTED AS AID TO POTATO MARKET

ESTABLISHMENT of clearing houses to stabilize the potato industry is suggested by H. H. Bakken, agricultural economist at the University of Wisconsin, as this type of a co-op will be greatly strengthened if congress passes the Haugen farm relief bill.

The bill pending in congress is an administration measure and will likely receive the approval of the president if it passes the two houses. It provides for a federal farm board, which will have charge of a revolving fund of $500,000,000, that is to be used for aiding co-operative marketing associations. Under the terms of the bill, clearing houses, organized by growers and shippers, could borrow from the board, if at any time it became necessary to have more funds.

A clearing house, as Bakken explained, is a form of a co-operative association of producers and dealers, handling a single product, or in some cases, of distributing the goods in an orderly manner. It would suggest minimum price from day to day, so as to avoid price cutting among its members.

An experiment conducted in Quebec, Canada, shows that potatoes which showed a slight blackening of the flesh produced only 56 plants out of 80 sets; with moderate blackening, 48 out of 80 grew; where severe blackening occurred only 21 out of 80 grew. With moderate or severe blackening the 80 pieces planted produced a yield of slightly over 6 lbs of potatoes, while potatoes showing no blackening produced 39 lbs. This blackening, or Black Heart as it is called, may result from chilling the potatoes, everheating them, or by storing where they do not get enough air, which may occur in too deep bins.

The Door County Fruit Growers Union

H. W. ULLSPERGER
General Manager

(Continued from June issue)

The small fruit growers of the county could not establish camps on an efficient and economical basis, so in 1920 a group of growers formed the Cherry Harvesting Association. A contract was made with the boys' division of the State Y. M. C. A. association to establish a boys' camp on the County Fair Grounds. Growers call at the Fair Grounds each morning for their quota of pickers and return them at 5 o'clock each evening. The boys in camp are under strict discipline, keeping regular hours, have evening movies and other sports after working hours, and go to church and on hikes on Sunday. During 1928, in line with our policy of centralized control, the assets of the Cherry Harvesting Association has been taken over by the Door County Fruit Growers Union and it is now operated by them. This insures the proper harvesting of all fruit for both large and small growers and gives equal protection to all.

Marketing

Cherries, when picked, are placed in 16 quart crates for fresh fruit market or in lug boxes holding approximately 25 to 30 pounds, and delivered to the canning factory. Up to 1918 all of our cherries were sold in the fresh fruit market. Market conditions are different. Today 90 per cent of all cherries harvested are canned or cold packed. Home canning has gone out of style. Apartment houses, flats, and kitchenettes do not permit home canning. The corner grocery, or chain store, well stocked with quality canned foods, is always nearby. The housewife can now prepare a meal in thirty minutes where formerly it took hours. The extra time she can utilize to advantage going to card clubs or Woman's Clubs meeting, read, or take a pleasant afternoon ride in the new Ford. Do you blame her? We don't. Just imagine your wife sitting down and taking the stems and pits out of two or three cases of cherries. About two hundred and fifty cherries to the quart; 16 quarts to the case; three cases, or 48 quarts times 250 is 12,000 cherries. It takes about 36,000 operations to do this. Then can them in summer over a hot stove; when the cool outdoors is ever so much more inviting. As the old saying goes, "Try it yourself and see how you like it." We have a modern, well equipped, sanitary plant, electrically operated with a maximum capacity for canning 400 tons of cherries daily. We can take pits out of 128,000,000 cherries every day during the canning season with a crew of about 450 employees. We could pack, if all cherries were placed in No. 2, or pint cans, 400,000 cans daily. This tremendous volume enables us to sell cherries properly processed at a lower price than they can be put up in the home, with quality just as good, if not better. Cherries packed in the factory are really better in quality, because the fruit goes from the orchard directly to the can. No one knows how long fresh fruit has been on the grocers' shelves.

Crop is Sold as Futures

Practically all canned cherries are sold as futures at a fixed price. During 1928 our entire cherry crop, valued at two million dollars, was sold during the month of February, harvested in July and August, and shipped to the trade in August, September, October and November. We know what price we will receive before the crop is harvested. We know where to ship after the crop is packed. There is no uncertainty. This is possible because our product is of uniform quality known by the trade, consequently samples are not requested. We have an established reputation.

Occasionally adjustments must be made but we experience little trouble along this line. Our cherries are sold in practically all states in the United States as well as in England and Scotland. Our largest consuming markets are in the Southwest; Kansas, Oklahoma, Texas, Arkansas, and even California. Your own state buys large quantities.

Cold Packing Becoming Popular

A new method of processing cherries has come into vogue during the last five years. Cherries are washed thoroughly as they are brought in from the orchards, sorted and pitted, washed again, then packed in barrels, half barrels, or five gallon tins as desired by the trade, and immediately frozen in temperatures ranging from zero to ten above. They are then kept frozen until used in making pies or pastries. Fruit packed in this manner retains its fresh fruit flavor and color better than when canned. The large pie bakers use cold-pack cherries exclusively. Processes are now being perfected to cold-pack all kinds of fruits and even vegetables. I have seen excellent samples of green peas, spinach, apples, and peaches cold packed. The quality of these samples was wonderful. The summer garden can now be had in the home in winter.

Proper Financing Very Essential

We require considerable money to operate during our busy season. Our local banks cannot supply enough, due to stringent banking laws which permit them to loan only 30 per cent of their capital stock and surplus, to any individual corporation. We,

therefore, made application to the Federal Interstate Credit Bank of St. Paul and now have a line of credit with them of $400,000, using canned goods as collateral. The rate of interest varies with fluctuations in the money market; In 1927 it was 4½ per cent and 5 per cent in 1928. Our local rate of interest is 7 per cent, therefore, we save a considerable sum of money by securing loans through the Credit Bank. These loans, as you know, are available to Co-operatives only and not to private corporations.

Grower's Supplies

We purchase supplies for our growers; thus saving considerable money for them. By pooling we are able to buy in carload lots at favorable discounts: there is a saving in freight and handling charges; there is very little selling expense as we book orders by mail; each grower estimating his requirements then places the order on file at the office, thus preventing over buying or under buying; the market is carefully watched and purchases made as favorable opportunity presents itself. Our supply business each year amounts to more than $100,000. We handle nursery stock, fertilizer, spray materials, fruit containers, and other items used in the fruit industry. Our margin for handling is small and the savings to growers is large. It pays big dividends to our members and aids materially in making fruit growing profitable.

Advertising

Our companies have not spent much money for advertising. A product of good quality advertises itself. However, in 1923 and 1924, we felt some advertising was necessary, so advertised in St. Louis and Milwaukee. These two advertising campaigns were very effective and stimulated consumption immensely. We specified and set aside a cherry week, during the week of Washington's birthday in February. Our slogan was, "George Washington did not cut down all the cherry trees. We still have some of those famous cherry trees in Door County producing that wonderful fruit relished by all." The campaign went over 100 per cent. No advertising has been necessary since that time but we are prepared to advertise when a surplus appears.

Marketing Other Fruits

In addition to marketing cherries, which we handle in large quantity, we sell strawberries, currants, gooseberries and apples. We find that there is special market for certain varieties of apples. For instance, New York wants the McIntosh, and practically all of our McIntosh go there at profitable prices. One of the A. & P. chain stores bought nearly all of our Greenings and really wanted more than we could supply. At certain times of the season Chicago is an excellent market; at other times when overloaded with fruit, it is difficult to even realize the price of fruit package. We have active representation in all of these places that give us daily information. By watching the market at all times we can avoid serious losses. We also have considerable storage facilities, and when as the saying goes, the "market is off," we do not ship any fruit.

We Cooperate With Other Cherry Producing Sections

We produce about 25 to 30 per cent of all pie cherries in the United States. When we name prices we co-operate very closely with other cherry producing sections, both canners and growers to maintain prices. It is not enough for growers in Door County to co-operate, but all cherry growing sections must work together to maintain profitable price levels. Competition is keen. We hear of new chain stores and grocery stores merging almost every week. Our business must be consolidated to present a united front; it must be operated just as efficiently; it must be in position to demand a fair price for the growers' product, a price that will permit them to educate their children as they should be educated, besides giving them better roads, better schools, better homes, better living conditions, allow them to have a radio, electrical equipment and labor saving devices in the field and in the house, and a new automobile once in a while just the same as his city cousin has. We believe we are making progress along these lines. Much remains to be done; more than has already been accomplished. We feel that a cooperative that is successful must have a product of excellent quality, produced economically and marketed efficiently. The watchword is "Cooperate," not only with producers in your own community but with growers and canners in other sections growing the same or a similar product. That is easier said than done, but we are making splendid progress. Meetings such as you are having today pave the way for a better understanding of these problems, and aid immeasurably in bringing about the things which we all desire.

The best recent publication we have seen on asparagus is Extension Leaflet No. 40 of Massachusetts Experiment Station, Amherst, Mass. If you send for it we suggest that you enclose 10c for cost of publication.

We are asked about the value of the salt water test for determining the germination of seeds. The method is to put two heaping tablespoonsful of table salt into a tumbler of water and stir. Seeds which float are classed as no good, those that sink are good. This is of very little value, as it simply separates the heavier seeds from the lighter and it is very possible for a seed to be heavy and still have no ability to grow.

Wisconsin Horticulture

Published Monthly by the
Wisconsin State Horticultural Society
119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S. H. S., Madison, Wis.
Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

THE BEST IRIS

According to a recent bulletin of the American Iris Society the following are the finest quality Irises. They are listed in order of preference; Ambassadeur, Princess Beatrice, Morning Splendor, Cardinal Germaine Perthuis, Pioneer, Mary Barnett, S. d., Loetitia Michaud, L. A. Williamson, Queen Caterina, Ballerine, S. de Mme. Gaudichau, Aphrodite, Tenebrae, Santa Barbara, Geo. J. Tribolet, Mme. C. Bouscant.

"Which would you prefer in your future husband—wealth, ability, or appearance?" asked the pretty girl.

Appearance, my dear," replied the spinster; "but he's got to appear pretty soon."

NOTES BY THE EDITOR

Now that the Garden Club Federation has demonstrated that a successful flower show can be held in Wisconsin it is a good time to begin thinking about the next show. Should another be held next year? Where and when? These questions should be decided at the annual convention this fall.

The date and place for the annual convention of the Society will be set at the meeting of the Executive Committee at Sturgeon Bay July 12. One of the important matters to be decided is the adoption of a plan of honoring horticulturalists who have rendered outstanding service in their profession.

Right now the editor is thankful there isn't a State Flower show every month.

The following bulletins may be obtained from the U. S. Department of Agriculture, Washington, D. C.

Frost and Prevention of Frost Damage—Farmers Bulletin No. 1588. Mushroom Culture For Amateurs — Farmers Bulletin No. 1587. Peppermint and Spearmint as Farm Crops—Farmers Bulletin No. 1555.

The Minnesota Horticulturist contains many interesting articles. We have the permission of the editor to use articles of special interest to our readers. In the June issue is one entitled "Floral arrangement and Color Harmony" by H. B. Dorner which we hope to use soon.

Among the new books suggested in the Minnesota magazine are: Foundation Planting by Leonard Johnson, (A. T. De LaMare Company, New York); American Plants for American Gardens, Roberts and Rehmann, (Macmillan Company); American Rock Gardens by Hamblin, (Orange Judd Publishing Company).

The program for the annual convention of the Society and the Garden Club Federation should be made good enough so members from all over Wisconsin would attend. Suggestions for such a program will be appreciated by the officers. Send them early.

Starting with one summer small fruit meeting at Sparta last year, this year the Society held three, and all were quite successful.

There is a great deal of value in these meetings and tours "We learn by observation", said Geo. Briggs, County Agent Leader, at the Bayfield meeting, and this was used as the idea of the tour.

Our observation was that on many farms the limiting factor in more profit was small yield of berries per acre. No matter what the price, a poor crop can yield no profit.

Fertilizers, winter covering, varieties, humus, soil handling and pruning are all factors which are under control of the grower.

Careful fertilizer tests by growers in different sections are needed for more complete information along this line.

Our article in the June issue entitled "Results with Fertilizers on Strawberries and Raspberries" by Prof. Marshall has created a lot of interest among growers.

The fact that nitrate fertilizers gave best results is something definite. One grower at Warrens applied only 0-10-10 containing no nitrogen. It is easy to lose money with the wrong fertilizer.

Some claim that nitrogen fertilizer will make the berries soft and poor shippers. No definite information on this point is available, and a sweeping statement cannot be true. Certain amounts at certain times may

cause this, but we know that plants must have nitrogen for growth.

Mr. J. E. Leverich of Sparta made a good suggestion at the Warrens meeting. "Every grower should have a small trial plot on which to grow new and promising varieties." We would add that they should apply different kinds of fertilizer, especially nitrates, on different rows at different times to see what the effect will be.

Raspberry growers who never give their canes winter protection should lay down a few rows this fall to compare the crop next year with those uncovered. We believe they will be surprised at the results.

An interesting trip for this summer will be to see the cherry harvest in Door County. About August 1st it will be in full swing.

Some of the cherry picking camps offer a good vacation job to boys and girls. We inspected several camps last year and found them in excellent condition. Close supervision is given and parents need not worry when their children are in these camps.

One of the best camps for girls we have ever seen was in the Bert Bingham orchards at Sturgeon Bay. Strict supervision is maintained, but during their free hours the girls have a fine time.

However, boys and girls should not go to the camps unless they expect to work during working hours.

Two elderly men, both extremely deaf, met on a country road. Dave had a fishing pole in his wagon. When he saw his friend Jim he stopped his horse.

"Goin' fishin'?" shouted Jim.

"No," Dave replied. "I'm goin' fishin'."

"Oh," said Jim, "I thought mebbe you was goin' fishing'."

Governor and Mrs. Kohler and son John, with Mr. M. B. Goff, when they arrived at Sturgeon Bay for the Cherry Festival.

OUR SHOW JUDGES ARE HONEST

Idea of Keeping Exhibitors Names Secret is Antiquated

SHALL the entry tags at our fairs and shows bear the names of the exhibitors? This is a much discussed question, many being very much opposed to it while others find it of considerable advantage to have the names appear on the tags even before judging.

At the State Garden and Flower Show the names were written on the tags and attached to the entry by the exhibitors. The Superintendents of the departments simply told the exhibitor where to place the exhibit, and wrote the owners name in the judges book under the correct class. There was no central entry clerk whom everyone wanted to see at once, and when the last vase was set in place everything was ready for the judges.

We believe in having the owners name appear on the entry tags because the public wants to know who the grower is and the grower wants to have the public know.

We have tried the method at several shows and by using care in getting good judges, have yet to hear of an exhibitor who thought he didn't get a prize because the judge knew his competitor. We believe judges of to day think more of their reputation as honest judges than they do of giving someone they know a prize.

If a judge, under the other system of secret numbers, wishes to give a prize to a friend, it isn't very difficult to find the friends number.

In livestock judging, where prizes run high both in cash and advertising value, the owner holds the animal, and the judge may ask him questions about it. Livestock men have found by experience that a good judge thinks something of his reputation.

An effort should be made by show officials to avoid the confusion and congestion resulting from a large number of people trying to enter exhibits with a central entry clerk. Furthermore, a great deal of time is taken in fixing up the judges books after all the entries are in.

Strawberry Grading

A. W. POMMERENING
Wisconsin Dept. Markets

SUCCESS in marketing strawberries is mainly dependent upon the proper picking, grading and packing of the fruit. Consumer demand must be taken into consideration. Consumers soon discriminate against berries that have been poorly graded and show from 25 to 50 per cent loss when being prepared for the table.

If you sell your berries locally or ship them either by local express or carlot shipments, they should be graded, and if possible inspected according to recognized standards so that you will receive every cent they are worth.

Standard grades serve as a guide to packers, and a common trade language between buyer and seller with which to describe quality, maturity, size and all factors that determine the value of a shipment.

Well-defined grades properly used promote honesty and fair dealing, builds good will and creates confidence, but discourages the careless and unscrupulous packer. The logical place to grade berries is in the field, but if inexperienced pickers are employed the grading should be done at the packing shed.

Strict supervision of the picking force is necessary and pickers should be taught the proper method of picking which will eliminate extra handling at the packing sheds. Strawberry boxes should be well filled but not so full that the cover will crush the berries.

Whether or not the berries have been graded, the boxes should be classified as to quality before they are placed in crates for shipment. Each crate should contain a uniform grade of berries.

The Federal food and drug act and the Wisconsin statutes requires that all crates of berries be marked showing the contents. If the variety, grade and the the grower's name and address are neatly marked on each crate, the prospective buyer will have confidence in the product.

Growers that pack and grade their berries according to standards should receive the best price obtainable for their efforts. Very unsatisfactory conditions are often found on the markets which indicate that more attention must be given to the grade of strawberries.

Some Wisconsin growers and shippers question the necessity of grading strawberries. In order to be convinced that grading is necessary to compete with those that do grade, it would be well for the objectors to make an examination of a carload of berries on some market which was loaded promiscuously at the shipping point.

Wisconsin growers and shippers of strawberries should pack their berries according to the tentative Wisconsin grades which are practically the same as the U. S. Standards, and thereby gain recognition for their product on the markets.

THE RASPBERRY BEETLE OR FRUIT WORM

REPORTS of damage caused by this insect reached us last week from Winnebago and Brown counties. Upon investigating the fields, we found that the damage is already as much as 20 to 25 percent. The injury consists principally of feeding by the beetles, which eat into and destroy the raspberry buds, and skeletonizing the unfolding leaves. Buds which are eaten into do not develop, or if they do, they produce lop-sided fruit. The adult beetle is small and light brown in color, being about one-seventh inch in length. At this season of the year, it lays its small eggs near the blossoms and leaves. The eggs will hatch in about a week, and the larvae will bore into the berries, feeding upon them, or beneath the berry cap. These larvae are found clinging to the berries when picked. This often causes a great reduction in the demand for the fruit.

The best control for these insects is a spray of arsenate of lead, using 2½ to 3 pounds to 100 gallons of water. (Small amounts, 2 rounded tablespoonsful to a gallon of water.) Spraying should be thorough, and repeated until the berries are in full bloom.

TESTS WITH MULCH PAPER FOR GARDENS

THE Michigan Agricultural College has issued a statement on the use of mulch paper for vegetable crops. They wished to test the claims made for commercial mulch paper, in the way of preserving moisture, reducing evaporation, killing weeds and increasing the early maturity of crops.

Michigan as well as Wisconsin growers manifested considerable interest in this new method of soil improvement, hence the Michigan Department of Agriculture carried on a preliminary test with paper mulch on some vegetables in 1928.

A plot of land was divided into four equal parts. Each alternate part was covered entirely with paper, except the parts along the rows. The other parts received ordinary culture. The soil was sandy loam and it was treated with 500 pounds to the acre of 4-8-6 broadcast fertilizer. A hand drill was used to plant the seed and one row was given over to each crop and the rows were 140 feet long. Proper attention was given to thinning and distances apart of the rows.

A mulch paper known as "gator hide," 18 and 36 inches wide, was laid in the rows right after the seed was planted. It

was fastened down either by clumps of soil, long iron staples or rocks.

Cool and wet weather prevailed at first, then the temperature and rainfall were above the average until late in July, followed by a cool, dry August.

Mulch paper produced the greatest difference with cucumbers and the least with sweet corn. There was an increase in yield and earliness of beans, cucumbers and sweet corn and an increase in yield only in cabbage, tomatoes and peppers.

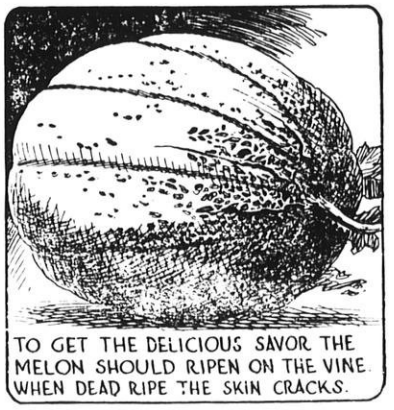
Yields on the basis of pounds per plant of edible portions were as follows for some of the vegetables:

	Pounds Mulched	Pounds Unmulched
May King Radishes	0.63	0.72
Danvers Carrots	0.29	0.27
Danish Ball Head Cabbage	5.8	4.4
John Bayer Tomatoes	12.6	4.4
Black Wax Beans	0.43	0.24
Peppers	9.4	4.5
Cucumbers	20.7	7.3

The Michigan data indicates that paper mulch is likely to be more beneficial on the warm season crops, especially in periods of midsummer drouth. The profitable use of paper as a mulch on cool season crops like lettuce and radishes is questionable. However, it is probably very effective and worthy of a trial on warm season crops having a high market value.

—WISCONSIN FARMER.

Mr. Carl Strand, of Carpio, asks about crabapple trees which have been burned to the ground and have sprouted up again. If the sprouts are below the graft union only a seedling apple is left and it is not worth saving. If the sprouts are above the graft the tree will now be in bush form which is the best possible shaped tree for North Dakota. Pruning should consist not in trimming off the lower branches but in taking out a few of the small limbs in the top where they grow too close together.—N. DAKOTA NOTES.



TO GET THE DELICIOUS SAVOR THE MELON SHOULD RIPEN ON THE VINE. WHEN DEAD RIPE THE SKIN CRACKS.

DO YOU KNOW CANTALOUPES?

VERY few people really know the full delight of a properly ripened cantaloupe which has now become the trade name for all varieties of muskmelons. There formerly was some difference between a true cantaloupe and a muskmelon but that difference has long since been lost. Very often there is complaint that the fine looking fruit bought in the market is insipid and of poor flavor. The time honored test of the condition of a muskmelon by smelling it doesn't operate in market melons with any degree of certainty.

It is infallible in the garden and it isn't necessary to put your nose on the melon to get the fragrance. It will rise up to salute you when the melon is fragrantly ripe and demanding to be eaten. Properly ripened cantaloupes are practically an impossibility in the market because they could not be kept and shipped should the grower wait until they were ripe. They must be picked green and shipped in that condition to ripen in the stores. Dealers keep them until they ripen insofar as they will.

To get the true delicious savor of a melon it must ripen on the vine and when it is fully ripe its keeping quality is of short duration. The only way to obtain the finest flavored melons is to grow them at home. They are no more difficult to grow than cucumbers and want precisely the same treatment. They can even be grown as climbers just as the cucumber can but in that case it will be necessary to give the melons support. Abroad they are grown in greenhouses trained up to the roof as they do not get proper heat to ripen them outside.

When ripe the skin of the melon turns yellowish in the light varieties and it cracks away from the vine at the stem and is easily picked. Its aroma is strong at this time. For the home garden pick out seed of early fruiting varieties and if the garden space is limited select varieties that are known to have less vining tendency than others. Give them a sunny spot, in warm well drained soil and the old method of sinking a tile for subirrigation as is often done with cucumbers is an efficient way to grow them. Early varieties may be planted now for an early fall crop.

TRIUMPHS INTRODUCED IN 1878

THE Triumph potato, also called Red Bliss, Bliss Triumph, Red Six Weeks, and Early Hunt, originated in Connecticut at an unknown date, according to Dr. Wm. Stuart of the U. S. Department of Agriculture.

It is claimed to be a seedling of the Early Rose. B. K. Bliss & Sons introduced the Triumph in 1878. It is one of our earliest maturing varieties and seems to be popular as an early crop in the extreme southern and southwestern states.

The tubers are round. The skin is light red, and it is quite an attractive potato. The plant is quite susceptible to mosaic disease.

The certified Triumph has been a money maker for quite a number of farmers in the northern section of Wisconsin. The demand in the southern states for mosaic free certified seed has been strong, and prices very high during the past four or five years.

State Garden Club Federation News

MRS. R. H. MALISCH, President
Hales Corners

MRS. C. W. VAUGHN, Vice-president
Madison

MRS. A. W. SPERBER, Sec'y–Treasurer
Hales Corners

THE FLOWER SHOW

MRS. R. H. MALISCH,
President

AS WE look back at our first Wisconsin Garden Club flower show we are filled with satisfaction for it has been recognized as a pronounced success by all who saw it. We thank all the garden clubs for their enthusiastic cooperation and fine work, especially the Madison Garden Club and the Madison Rosarians who did a large share of the work. We were fortunate in having our first show in the beautiful city of Madison. All who visited the different gardens and estates certainly were inspired by these wonderful places. There are few cities that can compare with Madison for scenic beauty.

We are very grateful to the management of the Loraine Hotel for the use of their hotel and also to the Madison Association of Commerce for their splendid cooperation. The different State departments, nurseries, landscape architects and retail stores also deserve credit. We thank the Hunt Brothers, commercial artists of Milwaukee for the art work on the posters and the cover design of the premium list. The hardest work was done by Mr. H. J. Rahmlow, our own Secretary and Editor of the Wisconsin Horticulture magazine. Let's give him a rising vote of thanks.

We shall give a brief description of the show for those who were not able to attend. The ball room of the hotel was transformed into a veritable garden. The layout was designed by Mr. Alfred Boerner of Milwaukee. In the center of the ball room was a fountain and pool with a "Rose Garden" and "A Garden Path" on either side of it. Along the walls were rock gardens, wild flower gardens, "A Bird Retreat," a garden called "Over the Garden Wall," formal borders and perennial gardens. An interesting display of Indians worshipping the spirit rock was put on by Burdick and Murray Company and Fred Bodenstein of Madison.

In the adjoining room the iris exhibit and miniature models were shown. On the mezzanine floor were the luncheon tables, shadow boxes and perennial flowers, in fact, the whole second floor of the hotel was transformed into a bower of beauty.

The show certainly served as an inspiration to flower lovers and was educational as well. Now is the time to start planning our show for next year. Let each garden club try to do something and we will make Wisconsin famous for its flower shows.

STARTING A GARDEN CLUB

WITH the rapid growth of interest in gardening over the entire United States during the last few years has come the birth of gardening organizations, national, state, county, city and community. The basis of all these organizations in the garden club which has become an important civic and social factor. Scores, even hundred of new clubs are being organized.

There has been frequent inquiry as to the methods of getting a club started. The first step is to call a meeting of those interested and decide upon the scope and size of the organization. Usually garden clubs are community affairs with a membership limited in size to a number that may be conveniently entertained in the homes of the members. The first step in organization is the election of officers, a president, secretary and treasurer, the last two often being combined in one person.

Following the election a committee is appointed to draft a constitution and by-laws for the organization, the members deciding upon the features they wish incorporated in the report of the committee. These will include the terms of membership, dues, meetings, and general purposes of the organization.

The character of the club at the start is largely determined by the garden experience of the members. If the majority of the membership consists of gardeners of little experience, the first year or two of the organization's existence is that of a study club. Later the scope of the club's activites is broadened to include shows and civic improvement.

Another form of club organization is the development of a garden branch of some larger organization such as a woman's club. It has been found by experience, however, that the independent garden club is the most successful. After the local organization is perfected and well under way. the next step is that of affiliation with a state or national garden club organization.

Who says the English have no sense of humor. We note that a new rhododendron discovered by the great English plant explorer, Kingston Ward, was named Big Bill Thompsoni.

ROCK GARDENS IS TOPIC AT EAU CLAIRE MEETING

AN ENTHUSIASTIC meeting of the Eau Claire Garden club was held at the Y. M. C. A. last evening with covers laid for 80 at the dinner. As the discussion topic of the evening was "Rock Gardens," Walter Demmler had constructed an attractive rock garden in the center of the room to illustrate his talk.

Soil Here Right

Mr. Demmler stated that the soil around Eau Claire was the right kind for rock gardens as it was light but said that porous rocks should be used in such a garden and such rocks could be found along the Mississippi river around La Crosse rather than here. In making the garden he said that the plants should be put in as the garden was being built so that the roots could be laid the right way.

In the matter of drainage the speaker brought out that the rocks should be tipped toward the back of the garden so that rains would not wash the soil away in the front. Alpine plants are a good choice for flowers and if those are used an east or a north exposure gives the best results. Yellow, pink and blue are good colors for a rock garden Mr. Demmler said.

The Garden club exhibit on the first floor of the Y was opened before the meeting began and many people came in during the evening to view the displays of plants, seeds, garden trellis and window boxes. The exhibit will be open to the public all day Saturday.

Many Boosts Awarded

Many boosts were given at the meeting. A patent window box presented by the Eau Claire Seed company was won by E. Q. Thomas, a fan-shaped trellis given by the John Oyaas Hardware company went to Miss Nan McLeod and a metal window box from the Standen Sheet Metal company was won by Mrs. H. M. Fesenmaier.

The most unique boost of the evening was presented by Sunset Farm, an exquisite pansy plant, won by Mrs. A. J. Geske, who guessed nearest to the actual number of blooms on the plant—115. Mrs. A. A. White won the filler for a window box given by Mr. Demmler and Mrs. Sol Patrow was awarded a cutleaf birch from Half Moon Gardens. Dahlia bulbs were won by Mrs. T. A. Hobbs, Miss Edith Fitzgerald and Mrs. George Robertson. Gladiolas were given to 24 club members whose names were drawn. Sol Patrow donated the $10.00 worth of dahlia and gladiola bulbs.

Visiting Committee

Mrs. A. L. Murray, president of the club, who presided at the meeting appointed a visiting committee to visit gardens during the next month, Mrs. A. H. Shoemaker, Mrs. H. F. Vanderbie, Mrs. Guy Wood and Mrs. Sol Patrow. Members of the visiting committee for the past month gave minute reports of gardens seen. Mrs. E. F. Burns was appointed chairman of the arrangement committee for the next meeting to be held June 7, with Mrs. G. J. Losby, Mrs. H. B. Bezanson, Mrs. W. Jackson, and Mrs. T. B. Keith on the committee.

Mrs. Keith spoke on her favorite perennial, larkspur, giving many reasons for her choice, adaptability, color, and habits of growth.

Mrs. Howard Culver was appointed chairman of a committee to receive flowers one day each week at the Y. M. C. A. for the hospitals of the city. It was announced that those who have garden flowers to spare may take them to the Y on a designated day and they will be taken to the sick and shut-ins.

F. T. Brunk gave a short talk at the close of the meeting on his sunken garden. — Eau Claire Times.

SUM MER DEL CLUB HAS FINE MEETING

MRS. M. M. DAY

FOR the May meeting of the Sum-Mer-Del Garden Club the members assembled at the home of Mr. Louis R. Potter on North Lake to see and to learn about his wonderful collection of iris. Mr. Potter lectured to the club on the treatment and care of iris—the kind of soil needed, the doctoring of sick plants, and the dividing of the rhizomes. Besides, he gave them a long list of choice varieties, pointing out the plants in his own garden, and describing their special characteristics.

After the lecture the members went on to the home of Mrs. H. E. Salsich in Hartland where the formal meeting was held and the business of the day disposed of. Included in the business were the reports of Mrs. W. F. Whitman, chairman of the Garden Show, and of Mrs. Le Roy Henze, who is taking charge of the exhibits to be made for the State Garden Show in Madison.

Continuing her lessons on wild flowers, Miss Moore gave out six new cards and discussed in a short talk the flowers illustrated. After the calendar activities for June were given, interesting garden experiences were compared and the club adjourned. Delightful refreshments were served by the hostess.

BORDER PLANTS DISCUSSED BY MILWAUKEE SOCIETY

THE May Meeting of the Milwaukee County Horticultural Society was held May 28th, in the Trustee's Room, at the Public Museum.

Border Plants was the program for the evening.

Mr. Herman Gutknecht gave us a talk on Polyanthus Roses; Mr. Arthur Kron, Alyssum and Ageratum and Mrs. O. J. Reus, Aquilegias and Snapdragons.

James Livingston of North Milwaukee, Wis., gave us a very

interesting talk on various Border plants, such as Violas and Primulas. In Scotland, Violas are grown from cuttings instead of seed, as here, he said Hundreds are propagated from cuttings and grown by name, which we cannot attempt to do here because of climatic conditions.

Gladiolas will be the subject of the June meeting.

—MABEL THOMS.

OSHKOSH SOCIETY NOTES

FLORENCE WINCHESTER
Secretary

THE June meeting of the Oshkosh Horticultural Society was held Monday evening, June 3rd at Mr. Roe's on the Fond du Lac road. Many members came early to visit the beautiful gardens there. After a delicious supper the meeting was called to order by the President, Mr. John Geiger.

The Flower Show was discussed. It will be held some time soon. Members exhibiting flowers should work for artistic arangement rather than numbers of flowers in a vase.

A group of fourth grade pupils of the Lincoln School, Alice Randall, Marie Winchester, Robert Sorenson and George Fem sang a group of Scotch songs. Marie Winchester spoke a piece in the Scottish dialect. The children were attractively dressed in Scotch costumes.

Mr. C. R. Fiss gave a short talk on paper mulch. He finds it to be a great labor saving device in his garden. Mrs. C. E. Strong of West Allis gave an interesting talk on "My Garden." Mr. and Mrs. Jacobs, who have recently returned from Arizona, exhibited a cactus cane brought as a souvenir from there. There were about 130 people present.

The University of Minnesota has found that alfalfa makes good greens. The cooked, tender leaves and stems make a palatable dish which is, no doubt, equal to other greens in vitamines.

STATE GARDEN AND FLOWER SHOW

(Continued from page 326)

Geneva Gardeners and Foremans Association. It consisted of gorgeous blooms of gladiolus, peonies, iris, columbine, pyrethrum, coral bells, day lilies, daisies, and meadow rue. This large exhibit was not entered for competition and the Lake Geneva Association deserves a great deal of credit for bringing these flowers.

The June Bride

One of the most beautiful and gorgeous exhibits at the show was the "June Bride" by Manchesters and Rentschlers, the former furnishing the mannequin and bridal costume while Rentschlers furnished the bouquets and decorations of the room. This exhibit is shown in an accompanying picture.

The bridal bouquet consisted of roses, feverfew and lilies of the valley.

A large stand contained a bouquet of gladiolus, peonies, ophelia roses, swansonia, maiden hair fern and lilies of the valley.

There was a wide vase with gladiolus, peonies, feverfew and fern, while Candelabra, ferns and palms formed the background.

The iris classes were the largest, which was natural considering the season of the year. However, there were many beautiful peonies exhibited and also roses although it was rather early for the latter. The winners in these classes are given in another column.

Peonies make a beautiful display and no doubt at some future time this show will be held during the peony blooming period, which would make a wonderful show.

Iris have not become so popular in Wisconsin as in some of our neighboring states but it was a very wonderful display of these blooms. Some of the latest and rarest varieties were exhibited. Mr. Geo. Morris took the sweepstake prize for the best stalk of iris in the show. Mrs. C. F. Felton of Madison also exhibited some wonderful blooms.

Other Garden Club Projects

The largest exhibit in the garden club projects was the shadow box class. Twenty-four shadow boxes were exhibited by the various garden clubs. The boxes were especially well made with beautiful frames and lined with black cloth. Many very attractive bouquets were on display. First prize was won by the Milwaukee Horticultural Society on a vase of gladiolus and blue flag iris.

Second prize was won by the Hawthorn Garden Club of Hales Corners. The bouquet consisted of calla lilies, gladiolus, stocks and lupine in a large blue vase.

Third prize was won by the Madison Garden Club with a vase of white and rose single peonies.

The Luncheon Tables

There were some very beautiful luncheon tables. First prize on round tables went to the Madison Garden Club. The committee consisted of Mrs. V. E. Bond and Mrs. F. M. Long.

The table consisted of Lenox China with white cover, low transparent goblets and a black vase. The floral arrangement consisted of a single stalk of iris with three blooms and foliage in a brass bowl. This was a very neat arrangement.

The second prize on round luncheon tables went to the West Side Garden Club of Madison. The committee consisted of Mrs. M. J. Shoemaker, and Mrs. Clarence Beebe. The table consisted of a green and white glass tableware. A green bowl with a bouquet of roses and feverfew formed the floral design.

Third prize went to the Nakoma Garden Club of Madison.

Their table consisted of a white embroidered table cover with rose and white tableware and columbine made a beautiful bouquet in a rose flower bowl.

First prize in the long tables went to the Janesville Garden Club. The table consisted of a cream linen table cover, blue glassware, pewter holders, beautiful flowered plates and Lenox China with colored flowers. The flower design in a pewter vase consisted of Calla lilies and light and dark blue delphiniums.

Second prize went to the Hillcrest Garden Club of West Allis. It consisted of white table cover with amber glass tableware and flower vases. A low bowl with iris and lupines formed the center vase while at each end were vases of iris.

Third prize went to the Madison Rosarians. The table cover was cream linen while the tableware was of white and amber glass with pink candles at each end of the table, while in the center was a beautiful bowl of pink roses and light blue delphiniums.

We were unable to properly describe the miniature gardens, in fact, we feel we have inadequately described any of the exhibits; so we have asked the committees designing them to write a description for publication We hope to publish detailed descriptions of other exhibits written by the committees.

The American Produce Grower, in speaking of roadside marketing, says that marketing by the producer requires first, better quality products; second, a fair price; third, prompt and courteous treatment.

"Pa, what does it mean here by 'diplomatic phraseology'?"

"My son, if you tell a girl that time stands still while you gaze into her eyes, that's diplomacy. But if you tell her that her face would stop a clock, you're in for it."—Union Pacific Magazine.

NOTES ON FLOWER SHOW EXHIBITS BY COMMITTEE MEMBERS

The Central Fountain

The central fountain in the ball room was designed by Miss Charlotte E. Peabody, Landscape Architect, and executed with the cooperation of Mr. John Novotsy of the University of Wisconsin, and staff, Mr. Shadel and assistants, and Wolff, Kubly & Hirsig, to whom thanks are due. The Wisconsin Foundry Co. of Madison loaned the pump and motor.

Plants were furnished by the Turville Flower Farm and Rentschler Floral Company. The hotel engineer and management were also most helpful in setting up the fountain.

A Garden Path

"A Garden Path" was the name of the little garden put on by the Men's Committee of the Madison Garden Club, consisting of the following: Fred Bodenstein, Madison, Chairman; John Reiser, Freeport, Illinois; Sam Post, C. Ovenden and B. M. Johnson, Madison.

The walk was laid with the flat stone so universally used, circling a sun dial of a modernistic design upon which was engraved the much admired quotation "Grow Old Along With Me, The Best Is Yet To Be."

At the base of the dial was planted the coral bell the leaves just covering it while the little coral bells upon the long stems seemed to float around it in the air.

As an inner edging to the path were used "snow in summer" (white) and false wall flowers (lavender). At either side of the outer edge of the circle joining the plantings in the corners were red English daisies, while on each side of the path as one entered the circle was a triangle of different colors of long spurred aquilegia in the center of which was a cluster of armaria gigantea (lavender) the whole effect being light and airy.

—Fred Bodenstein.

"My Rosarie"

The little garden "My Rosarie" exhibited by the Madison Rosarians was the center of much interest being the only rose garden in the show.

The plat was 6 x 10, hedged with Anthony Waterer Spirea and sodded.

Across one corner was a rose trellis four feet high, two and one-half feet across and eighteen inches wide.

Trained over this were two pink Dorothy Perkins in full bloom. In front of each side of the arch was a Claudius Der Pirnet, its buds not fully bloomed, lovely in its clear golden yellow and beautiful form. Opposite the arch were a group of red ramblers, one a red rambler, the other an Edith Carrill beside which rested the most cunning low typed bird bath, and a magnificent Magna Charta in full bloom completing one side. Opposite the Magna Charta was an Ann Keller and a Salmon Queen of the rambler type which completed the garden.

The roses were all in full bloom except the Golden Pirnet which was more than half blown. The committee who put it up was Mrs. J. A. Reed, Chairman, Mrs. A. A. McLeod and Mrs. H. B. Stagner.

—Mrs. J. A. Reed.

Birds Retreat

The little garden, "Birds Retreat" consisted of trees taken from North Lake Cedar swamp. Flowers were purchased at the White Elm Nursery of Hartland, Wisconsin and some donated by Mrs. C. E. Strong of West Allis.

Birds were donated by Mrs. Geo. Leverenz of West Allis, the bird house by Mrs. H. Behlendorf of West Allis and a bird bath secured by Mrs. Dean of Madison.

The blue and yellow violas, the iris, birds and bird bath were set off by a background of

cedar, ranging from six to eight feet in height, spruce trees and juniper shrubs.

On the right side of the garden stood the bird bath, upon which perched a little robin. In back of the bath stood the largest cedar tree which held a feeding tray and a charming red cardinal.

A bird house was in a tree nearest the blue jay, which was feeding on some sun flower seed on the lawn to the left of the garden.

Blue and yellow iris were planted to one side of the bird bath. On the left side of the garden blue and yellow violas were planted.

Anyone can have such a happy place for birds, if they will give seclusion, food and water.

The committee of this little garden consisted of Mrs. H. P. Fleischer, Chm., Mrs. E. Fehnestock and Mrs. H. Behlendorf of West Allis.

—MRS. H. P. FLEISCHER.

The Winning Miniature Model

The miniature model exhibited by the Hawthorn Garden Club of Hales Corners won the first prize. It showed a charming English type of home with the garage attached to the house. This left the entire back yard for a garden. A flag stone terrace, leading from the living room, overlooked the gargen. This first part of the garden, nearest the house was designed in a rather formal manner. An extensive space of lawn was bordered with fine shrubbery. Stepping stones led to the second part, which was about four feet lower and of a very different character, being very informal.

A wall garden planted with bright colored rock plants divided the two. The informal garden consisted of rock work, tiny pools with a cascade and also a bog garden. A rustic bridge connected the pools. The tea house in the corner was also of rustic design to harmonize with this end of the garden. Garden seats were placed so that one could enjoy particularly good views of the garden.

—MRS. R. H. MALISCH.

WINNERS OF THE GARDEN CLUB PROJECTS

LITTLE GARDENS

First Prize

"Over the Garden Wall"—Madison Garden Club—Ladies Committee—Mrs. Scott Mackay, Chairman.

Second Prize

"Bird Retreat"—Hillcrest Garden Club, West Allis—Mrs. Geo. Leverenz, Chairman.

Third Prize

"A Garden Path"—Madison Garden Club, Mens Committee—Fred Bodenstein, Chairman.

Honorable Mention

"My Rosarie"—Madison Rosarians—Mrs. J. A. Reed, Chairman.

Honorable Mention

"Rock Garden"—Milwaukee Horticultural Society—Mrs. Irma Reuss, Chairman.

SHADOW BOXES

First Prize

Milwauke Horticultural Society—Milwaukee, Wisconsin—Mrs. Noerenberg, Chairman.

Second Prize

Hawthorn Garden Club—Hales Corners—Mrs. A. W. Sperber, Chairman.

Third Prize

Madison Garden Club—Madison, Wisconsin—M. V. Brown, Chairman.

Honorable Mention

Sum-Mer-Del Garden Club—Hartland, Wisconsin.
Eau Claire Garden Club.
Ft. Atkinson Garden Club.
Kenosha Horticultural Society.
Nakoma Garden Club.
Madison Rosarians.
Hillcrest Garden Club.

LUNCHEON TABLES

Long Tables

1st, Janesville Garden Club, Mrs. Harry Bliss, Chairman.
2nd, Hillcrest Garden Club, Mrs. Geo. Leverenz, Chairman.
3rd, Madison Rosarians, Mrs. J. A. Reed, Chairman.

Round Tables

1st, Madison Garden Club, Mrs. V. E. Bond and Mrs. F. M. Long.
2nd, West Side Garden Club, Mrs. M. J. Shoemaker and Mrs. C. H. Beebe.
3rd, Nakoma Garden Club, Mrs. Aubrey Williams, Chairman.

Honorable Mention

Milwaukee Horticultural Society, Mrs. E. C. Haasch, Chairman. Long Table.
Madison Rosarians, Mrs. J. A. Reed, Chairman, round table.

Special—Honorable Mention

Madison Vocational School, Miss Grady, Chairman.

WINDOW BOXES

First Prize

Madison Garden Club—Madison, Wisconsin—Mrs. Edith Gifford, Chairman.

Second Prize

West Side Garden Club—Madison, Wisconsin—Mrs. Louis Sassman, Chairman.

Third Prize

Hillcrest Garden Club—West Allis, Wisconsin—Mrs. Joe Simon, Chairman.

Honorable Mention

MINIATURE MODELS

First Prize

Hawthorne Garden Club—Hales Corners—Mrs. R. Malisch, Chairman.

Second Prize

Hillcrest Garden Club—West Allis, Wisconsin—Mrs. Hobarth, Chairman.

Third Prize

Madison Garden Club—Madison, Wisconsin—Clara Larsen, Chairman.

Special—Honorable Mention

Madison Vocational School—Miss Grady, Chairman.

PREMIUM AWARDS

CLASS A—IRIS

Collection of Iris not bearded (including Siberica, etc.,). One to three stalks of each variety.
1st, Mrs. E. C. Schneider, Madison
2nd, Mrs. E. R. Stevens, Madison
3rd, Mrs. Wm. Gilbert, Madison

Collection of 4 different varieties of Iris (Siberica or Orientalis). Three stalks each.
1st, Mrs. Jas. McCredie, Madison

Artistic display of not more than 25 stalks of beardless Iris with own foliage (appropriate tile containers).
1st, Mrs. Jas. McCredit, Madison
2nd, Mrs. Johanna Clark, Ft. Atkinson

Artistic display of not more than 10 stalks of beardless Iris with or without other hardy flowers and foliage. Bowl.
1st, Mrs. F. M. Wilcox, Madison

Artistic display of not more than 15 stalks and not more than five varieties bearded Iris with or without other flowers and foliage. Baskets.
1st, Mrs. McCredie, Madison
2nd, Mrs. C. Pohlman, Milwaukee

Artistic display of not more than 10 stalks of bearded Iris with own foliage. Low dish or bowl.
1st, Mrs. Jas. McCredie, Madison.

Artistic display of 10 stalks or more of one variety bearded Iris to suggest the effect of a garden clump. (Lifted plants are barred).
1st, Mrs.E. C. Schneider, Madison

Specimen stalk, self-colored, white, (examples, White Knight, Kashmir White, etc.).
1st, Geo. Morris, Madison.

Specimen stalk, self-colored, yellow, (examples, Sherwin Wright, Shekinah, etc.).
1st, Dr. F. A. Davis, Madison
2nd, Mrs. W. Weck, West Allis
3rd, Mrs. Mark Troxell, Madison

Specimen stalk, self-colored, pink, (examples, Dream, Georgia, etc.).
1st, S. M. Thomas, Lodi
2nd, Geo. Morris, Madison.
3rd, Mrs. Jas. McCredie, Madison

Specimen stalks, plicata, (examples, Mme Chereau, Mme. Chobaut, etc.).
1st, Geo. Morris, Madison
2nd, Dr. F. A. Davis, Madison
3rd, S. M. Thomas, Lodi.

Specimen stalk, self-colored, lavendar, light blue or mauve, (examples, Ballerine Corrida, Mlle Schwartz, etc.).
1st, Mark Troxell, Madison
2nd, Mrs. W. Weck, West Allis
3rd, Mrs. B. G. Elliott, Madison

Specimen stalk, Amocana type, White Standards, (examples, Rhein Nexe, Mildred Presbu, etc.)..
1st, Dr. F. A. Davis, Madison
2nd, Geo. Morris, Madison
3rd, Mrs. F. X. Schoen, Madison

Specimen stalk, dark blue, red purple or blue purple, (examples, Souv. de Mme. Faudichau, Lent A. Williamson, etc.).
1st, S. M. Thomas, Lodi
2nd, Mrs. J. A. Taylor, Madison
3rd, Geo. Morris, Madison

Specimen stalk, blended tones, (examples, Aftergrow, Isoline, etc.).
1st, Mrs. F. M. Wilcox, Madison
2nd, Geo. Morris, Madison
3rd, Dr. F. A. Davis, Madison

Specimen stalk, dark bi-color, (examples, Ambassadeur, Bruno, etc.).
1st, Geo. Morris, Madison
2nd, S. M. Thomas, Lodi
3rd, Mrs. Martin Glaeser, Madison.

Specimen stalk, reddish tones, (examples, Leverrier, Seminole, etc.).
1st, Geo. Morris, Madison
2nd, Mrs. Wm. Gilbert, Madison
3rd, S. M. Thomas, Lodi

Specimen stalk, best stalk of Iris in the show. Sweepstake prize.
1st, Mrs. E. C. Schneider, Madison
2nd, Mrs. A. J. Taylor, Madison
3rd, S. M. Thomas, Lodi

Collection of 25 distinct varieties, one stalk each.
1st, Geo. Morris, Madison
2nd,Mrs. Wm. Gilbert, Madison
3rd, Mrs. W. Weck, West Allis

Collection of six distinct varieties, 3 stalks each.
1st, Geo. Morris, Madison
2nd, Mrs. J. J. Simon, West Allis
3rd, Dr F. A. Davis, Madison

Best display seedling Iris.
1st, S. M. Thomas, Lodi
2nd, Mrs. George Ritter, Madison

Miniature Garden Pool, using trays 16x24 inches
1st, Mrs. R. H. Malisch, Hales Corners
2nd, Miss Clara Larson, Madison

CLASS B—PEONIES

Vase of 10 blooms, double, one variety, names.
1st, F. M. Wilcox, Madison
2nd, Mrs. Theresa Wilcox, Madison
3rd, Mrs B. A Robinson, Kenosha

Vase of three blooms, white, double, named, one variety.
1st, Mrs. J. A. Taylor, Madison
2nd, F M. Wilcox, Madison
3rd, Mrs John Wilken, Madison

Vase of three blooms, light pink or pink and cream, double, named, any one variety
1st, Mrs. C. H. Andrus, Madison
2nd, I. S. Fuller, Madison

Vase of three blooms, dark pink, double, named, any one variety.
1st, Mrs. J. A. Taylor, Madison
2nd, Mrs. F. M. Wilcox, Madison
3rd, Mark Troxell, Madison

Vase of three blooms, red or crimson, double, named, any one variety.
1st, Sarah Francis, Elkhorn
2nd, I. S. Fuller, Madison

Large basket main feature to be Peonies.
1st, Mrs. F. M. Wilcox, Madison
2nd, Mrs. E. L. White. Ft. Atkinson

Best peony in show.
1st, I. S. Fuller, Madison.

CLASS C—ROSES

Most artistic basket, any color.
1st, Geo. Morris, Madison

Most artistic bowl of Roses, any color.
1st, Mrs. H. T. Hartwell, Madison
2nd, Mrs. Elizabeth Milward, Madison
3rd, Mrs. F. X. Schoen, Madison

CLASS D—PERENNIALS

Delphinium—Basket or vase, one variety.
1st, Mrs. Geo. Parker, Janseville

Columbine—Vase of long spurred mixed varieties.
1st, Mrs. Stanley West, Madison
2nd, Mrs. Jas. McCredie, Madison
3rd, Mrs. H. Schutz. Madison

Columbine—Artistic bouquets of Columbine in any choice of containers with or without other foliage.
1st, Mrs. E. M. Tiffany, Madison
2nd, Mrs. C. H. Andrus, Madison
3rd, Miss D. M. Graham, Madison

Lilies—Not more than 5 stalks of Lemon Lilies.
1st, Mrs. Harry Agard, Elkhorn
2nd, Mrs. F. X. Schoen, Madison
3rd, Miss Bertha West, Madison

Shasta Daisies—Most artistic basket or vase.
1st, Mrs. J. A. Taylor, Madison
2nd, Mrs. Chas. Ovenden, Madison
3rd, Mrs. W. Weck, West Allis

Pyrethum—Most artistic basket or vase.
1st, Mrs. H. T. Hartwell, Madison
2nd, Mrs. J. A. Taylor, Madison
3rd, Miss D. M. Graham, Madison

Sweet William—(Dianthus Barbatus) Most artistic basket or vase.
1st, Mrs. H. T. Hartwell, Madison
2nd, Mrs. F. M. Long, Madison

Oriental poppies—Artistic basket or vase.
1st, Francis Post, Madison
2nd, Miss Bertha West, Madison
3rd, Mrs. J. A. Taylor, Madison

Lupines—Artistic basket or vase, one or more varieties.
1st, Chas. Ovenden, Madison
2nd, Mrs. F. M. Wilcox, Madison
3rd, Miss D. M. Graham, Madison

Mixed Bouquet—Most artistic arrangement.
1st, Mrs. Harry Bliss, Janesville
2nd, Mrs. H. T. Hartwell, Madison
3rd, Mrs. Geo. Parker, Janesville

Pansies, Bowl of mixed varieties.
1st, Mrs. E. C. Haasch, Wauwatosa
2nd, Mrs. Oscar Jensen, Madison
3rd, Mrs. F. M. Long, Madison

SPECIALS FOR FLOWERS NOT LISTED

Five best exhibits not included in classes above.
1st, Mrs. Carl Felton, Madison
2nd, Mrs. H. T. Hartwell, Madison
3rd, Miss D. M. Graham, Madison
4th, Mrs. O. H. Andrus, Madison

Two next best exhibits not included in classes above
1st, Chas Ovenden, Madison
2nd, Miss A. Kyle, Ft. Atkinson

Two next best exhibits not included in classes above.
1st, Mrs. H. Schulz, Madison.
2nd, Chas. Ovenden, Madison

DAHLIA DISEASES

(Continued from page 330)

the juices and immediately starting a new generation. This insect, so very minute and completing its life history in such a short time, is really a more serious pest than anyone would imagine from its size. It usually appears about the end of June, sometimes earlier if the weather has been warm, so that all through the warm months of the year it can have a great number of broods. As this insect is a sucking insect, it is controlled by a contact spray or by asphyxiation. It works in the folded leaves of the growing point, and is therefore somewhat difficult to control by a spray, for unless the spraying is done repeatedly and effectively, the insects will escape.

Any nicotine spray will control thrips and the best proportions to use are one part of 40 per cent nicotine sulphate, diluted with 800 parts of water; one ounce of fish oil soap should be added to each gallon of the solution. Spraying should always be done in the hottest part of the day as the gas given off from the nicotine will tend to kill by asphyxiation. A nicotine dust is also used by many with good effect and this dust should as well be applied in the hottest part of the day and when the sun is shining. As this pernicious little insect sucks the juices out of the young leaves and tender growing point, it sets up an irritation and when the leaves develop they show the effect of this by being a paler color. The leaves have been popularly called lungs of the plant, but they are more than mere lungs; they are the workshops in which the food is manufactured for the nutrition of the plant. Certain elements are taken in from the atmosphere by the leaves, and in the leaves these elements are combined with the elements taken in by the roots, thus converting the whole into food.

The very smallness of the thrips makes this a serious pest to the grower, especially the amateur, because the insects are not seen unless looked for, and the first indication of their presence is noted when the plant begins to stunt. To properly control any insect a regular schedule of spraying or dusting should be evolved; the old adage that prevention is better than cure is well exemplified in the control of insects. I spray or dust twice a week during the latter part of June and July. By that time the plants have usually gotten such a good hold that they can better withstand the attacks of any insects. It is when the plants are young and before they have a good root system of their own that insects do the most damage.

Leaf Hopper

The leaf hopper is another insect that helps to bring about a stunted condition of the plants. It might be said that thrips start it and the hopper finishes it. It do not think this insect is as serious as the thrips, for the reason that it can be seen readily, and when an insect is visible, one usually takes steps to control it. There are two stages of this insect, the nymph and the adult, in which it lives by sucking the juices. It is greenish in color and usually appears about the beginning of July, always attacking the weakest plants. It is usually found running around along the underside of the leaf, but does not get into the folded growing point like the thrips, so can be more easily reached with a contact spray. The same spray or dust used for control of thrips will keep this insect in check, but it is difficult to get a 100 per cent kill as it will hop right in front of the spray. I have found the nicotine dust a better control of this insect than a spray, providing a good cloud of dust is blown about the plants during the hottest part of the day. After dusting, the plants should again be sprayed in the evening with clear water, as too much dust may close up the stomata or breathing pores of the plants.

I would urge all those who have had this trouble with the Dahlia—and I do not know of any who have been free from it—not to become discouraged and not to blame the stock or those from whom it was purchased. There is no unpreventable or incurable disease among Dahlias; we as gardeners have to meet the same conditions with all the plants we grow. Every plant has its natural enemies, and as these plants are more widely and intensively cultivated, so also do their nature enemies become more numerous. Therefore, the gardener must be ever on the alert to keep the enemies of the various plants down to a minimum in order that he may have healthy and productive stock.

Controlling Dahlia Diseases

Mildew is a fungoid disease that in some sections troubles the Dahlia grower. The beginner is usually more troubled by it than the more experienced gardener, for the latter knows at once how to keep it under control. It is a curious fact that the mildew attacks only the older leaves of the Dahlia, while on most plants it is the young and tender parts that are affected. For this reason it is not a very serious disease. All old leaves should be picked off to allow better circulation of air, for it is the stagnant air around the roots of the plant that is so conducive to its growth. In addition, a dusting of grape dust or flowers of sulphur will keep the trouble in check.

Stunted Condition of Plants

The so-called stunt disease is, in my opinion more often caused by various conditions than by a disease. Stunted plants may, for instance, be caused by improper planting or too deep planting; and so will the use of dried up tubers. A plant that is getting stunted will usually show the condition quite

early in the season, and it should then be dug up at once and thrown away. There is no use wasting time over it; far better throw it way and put another in its place.

I have frequently seen a good healthy plant suddenly stop growing and go into this condition and, on examining the roots, have found that a mole had burrowed under it, thus cutting off its supply of moisture and allowing the root to dry out. I have also found the larva of the June bug (the white grub) eating the roots and causing this condition.

If a tuber is allowed to sprout too many shoots, they may all become stunted, using up all the stored food material before they can make roots.

A check at the time of planting such as might result from a lack of water causing some of the roots to die, will also create this condition.

By the use of healthy young plants propagated from selected stock, I have in my own plantings reduced this condition to the minimum, seldom having as much as one per cent of my plants show it. But where roots have been used I have seen as high as 50 per cent stunted.

I have talked with many a prominent grower the past season, and they all agree with me that this stunted condition of the plants is a serious menace to the Dahlia industry. Many growers, as soon as you mention the stunt to them, immediately say that it is the result of overfeeding in order to produce exhibition blooms, and let it go at that; most of them say that it is the result of feeding with nitrate of soda, the plants becoming weakened and getting stunted the following season. I wonder how many of these growers making this statement ever took the trouble to experiment to see if they could not find another reason for the cause.

I have never used nitrate of soda on my Dahlias, nor do I know any grower who does. I grow exhibition Dahlias and know many other growers who grow for exhibition, yet it is a notable fact that you will see less evidence of this stunted condition in the gardens of these exhibition growers that you will find in the gardens of those who do not grow for exhibition and who claim that they do not feed; therefore, we should look for some other cause than this old bugaboo of overfeeding and overpropagation.

I have given this stunted growth of the dahlia a very close study, and I am convinced that about 90 per cent of the trouble is caused by the attacks of insects and the other 10 per cent caused by faulty root action contributed by other causes. I have yet to be convinced by scientific research that there is a disease that causes this condition without the aid of insects. I claim that if there were such a disease, the disease would eventually kill the plant, but we all know that as soon as the cool nights come, these stunted plants do somewhat recover, simply because the ravages of the insects are lessened. I have proven many times that stunted plants can be cured, not by the aid of any fungicide, which would be necessary if it were a fungoid disease, but by the use of insecticides. Of course, these retarded plants, which only begin to grow late in the Fall do not make good tubers, if any, and while it has been proven conclusively by actual experiment that they can be saved and produce perfectly normal plants the following year, yet it is not advisable to try and keep them. Some varieties are more subject to this condition than others. Usually those with the thin, paler leaves are the worst sufferers.

One of the first steps to be taken in securing more healthy Dahlias is by a proper selection of varieties, because it is a well-known fact that, while some varieties are very susceptible, others are practically immune. This is a fact to which the hybridist has not paid enough attention. If the producer of new varieties would work along scientific lines, trying to produce more resistant varieties and not introducing any variety, no matter how beautiful, if it is inclined to stunt, a great step in the right direction would be gained. This has been accomplished with great success with other plants, notably the potato.

If all those who issue catalogs, in addition to repeating the glowing descriptions as given by the raiser, would impart a few facts regarding the habit of the variety as they had found it by their own experience, it would prove of great assistance to the amateur, because it is a well-known fact that certain varieties will be more subject to the stunted condition in certain localities. A catalog would then be more than a mere means of getting orders; it would prove a real guide in selecting the proper varieties.

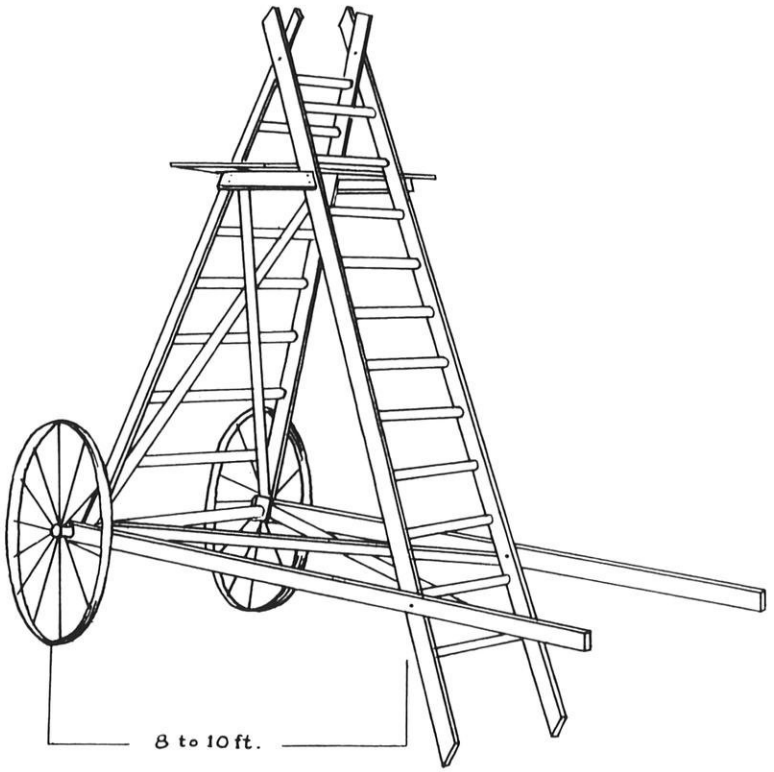
HAY FEVER MISNOMER

THE real cause of hay fever, says Dr. R. P. Wodehouse, of the research staff of the New York botanical gardens, is the fine dustlike pollen grains of plants. They float around in the air, get into people's noses, and set up irritations. The trouble with the name "hay fever," he says, is that it is not a fever and the trouble is not caused by hay. Thus, the name is a misnomer. Although the symptoms of hay fever belong to the spring, summer and fall, now is the time to begin preventive treatment, it is pointed out. Hay fever can be prevented if treatment is begun early enough. The preventive treatment consists of inoculating the sufferer with extracts of the pollen which causes the trouble. The plant or pollen which causes hay fever in each individual is determined through specific tests.

A Handy Orchard Ladder for the Farmer

CONRAD L. KUEHNER

THE accompanying sketch is a rough working plan of an orchard ladder on wheels which has been adopted by quite a few of our best Wisconsin farm orchardists whose trees are large and tall. Folks who have never used one of these ladders can not fully appreciate the value of this piece of orchard equipment. It is ever ready, very easy to move and more safe than any other type of ladder. It does not break the branches as ordinary ladders do if improperly used. It enables you to get to any outside branch for pruning or picking.



In picking, the ladder has the added advantage of not shaking the fruit to the ground while the picker is adjusting his ladder and himself for picking. It also accommodates two workers at the same time. It is very useful in thinning the fruit on those big tall overloaded trees and is fully as useful in the detail pruning of the ends of high branches of old tall trees.

The ladder will also come in handy about the house and barn in placing and removing storm windows and screens, in cleaning eave troughs and bird houses, and in other jobs which require the use of a handy ladder.

The ladder is easily built. Any farmer can make it out of materials he has on the place. It should be built of good, straight grain lumber, well nailed and securely bolted and braced. The slant or incline of the ladder must be just steep enough so that anyone working from the ladder can rest his knees against the round next above the one on which his feet are resting. This will make it possible to use both hands at the job that is being done while on the ladder.

Anyone interested in building one of these ladders may secure a plan by writing the Horticultural Dept., College of Agric., Madison.

MENOMONIE MEETING

(Continued from page 329)

Many successful raspberry growers claim they lose a great deal unless they cover the canes in winter. A number of Dunn County growers will cover at least part of their field this fall to see what the results will be.

The second stop was on the farm of F. Neubauer. Mrs. Neubauer had a wonderful garden of flowers making the home grounds a beautiful place.

Their Latham raspberries looked very good. They grow Dunlap, Dr. Burrel and Premier strawberries, each variety doing well.

On the farm of C. V. Porter an interesting experiment station was found. He has a great many new plant introductions and is grafting new varieties of peas, cherries and other fruits on hardy stock. Mr. Porter has promised to write an article on his work, especially his success in grafting with the parafine method.

The fourth stop was at the garden of C. M. Russel, who is experimenting with paper mulch. His entire garden plot 40x60 was covered. Mr. Russell stated the paper saved a great deal of labor, but is not profitable on many crops due to the expense. His results were much the same as those given in the Experiment on paper mulch found in another column of this issue.

On the farm of C. E. Crandal seven and one-half acres were devoted to small fruit. There

were four acres of King raspberries and two and one-half acres of Latham. For some reason hard to explain the Kings were more vigorous than the Lathams in this field, although the latter were not as vigorous as those seen on some other farms, perhaps due to soil conditions. Winter covering was advocated here with a nitrate fertilizer to stimulate growth.

The last stop at the Menomonie Eau Claire Nursery. Mr. Geo. Moseman, a very enthusiastic horticulturist, manager of the nursery, told of the method of propagating nursery stock.

A very fine storage cellar was inspected. The nursery has many fine evergreens and other ornamentals. Seven acres are under cultivation at Menomonie and fifty acres at Eau Claire.

One of the interested parties at the meeting who also attended the Warrens meeting, was Mr. C. Beaver of Eau Claire, originator of the Beaver strawberry. He told of his experience in strawberry growing at several stops. We hope to have an article soon by Mr. Beaver on this method of breeding new varieties, and how he originated the Beaver.

HOME GROUNDS CONTEST IN LA CROSSE COUNTY

OVER fifty farmers living on highways 33 and 16 in La Crosse county have entered their farms in the second annual home grounds beautifying contest to be conducted jointly by the rural planning committee of the county board of supervisors and the state college of agriculture.

The county board has appropriated $100 to be divided into prizes for the two divisions into which the contest is divided, and after the final judging of the farms in the contest late in the summer by Prof. J. G. Moore and Prof. F. A. Aust both of the college of agriculture the awards will be made.

The two subdivisions of the main contest are a home improvement contest, and a best home grounds contest. There will be $65 distributed among the winners of the first six places in the first contest, while $35 will be had for three places in the second.

The basis of award in the home grounds improvement contest is the greatest improvement made in the home grounds from date of the first scoring, May 1 and 2, to August 15.

The entries will be rated according to the following points: Lawn grading, 250; character of lawn turf, 200; condition of lawn upkeep, 100; planting of trees, 75; planting of shrubs, 125; planting of flowers, 100; location of trees, 100; location of shrubs, 150; location of flowers, 150; suitableness of trees, 55; suitableness of shrubs, 65; suitableness of flowers, 30; permanency of trees, 45; permanency of shrubs, 35; permanency of flowers, 20; condition of trees, 15; condition of shrubs, 75; condition of flowers 60; condition of outline of beds, 25; condition of weeds in beds, 15; and condition of soil in beds, 10.

The prizes for this contest are divided as follows: First place, $25, second place, $20; third place, $10; fourth place, $5; fifth place, $3; nad sixth place, $2.

The best home grounds as shown by the second scoring, regardless of when improvements were made, will be awarded prizes of $20, $10 and $5 for first, second and third.

ROSE DISEASE CONTROL

(Continued from page 332)

monia spray as above stated, he also states that he sprayed the ground with ammonia and formaldehyde, of each 1 oz. to one gallon of water, giving a good top dressing of agricultural sulphur. Dusting with flowers of sulphur has been very successfully used for mildew. A spray of lime sulphur has been recommended but it leaves the foliage in a bad state.

Black leaf forty and arsenate of lead are efficient in the control of aphis and also is recommended for mildew. Prof. J. G. Moore of the University of Wisconsin has given this formula for its preparation:

¾ to 1 teaspoon of black leaf forty
2 level tablespoons arsenate of lead
1 oz. of any variety of soap
1 gal. of water

Mix thoroughly. Apply with a spraying machine or whisk broom.

A lime sulphur solution, one part of the commercial concentrated solution to fifty parts of water has been used with more efficiency than Ammoniacal copper carbonate, and probably as much so as Bordeaux mixture and the sulphur lead dust.

Rose slugs are best controlled by handpicking. Spraying with water heated to 120 degrees Fahrenheit has also proven of value.

Plant lice and aphis should be sprayed three days following to make certain of their destruction and may have to be continued at intervals throughout the season.

For rose leaf hopper, a spray of tobacco extract applied to the under side of the leaf; this is also effective for aphis.

The common June Bug is one of the most persistent and destructive pests and is best controlled by arsenate of lead mixed with cheap molasses or glucose and spread around where they can get it. Hand pick into a vessel containing kerosene. A propriety insecticide known as Melrosine is a successful check to Rose Chafers (June Bug).

Lime sulphur spray will eradicate rose scale.

Most of the pests, (I have not mentioned all) are easily controlled by the remedies and sprays recommended.

If we would be successful rose growers, constant vigilance, constant work, constant spraying is the price of success.

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

NURSERY STOCK—SHRUBS

NURSERY STOCK FOR SALE. American Arbor Vitae, many sizes at reasonable prices. Send for large lists and planting directions. Order early for spring time planting. American Forestry Co., Pembine, Wisconsin.

APPLE SEEDS—Fresh and clean. Will sell while supply lasts at $1.00 per lb. American Forestry Co., Pembine, Wis.

LILY BULBS

REGAL LILIES. Nice blooming bulbs $2.00 per doz. Extra large size $3.25 per doz. Post paid. H. C. Christensen, 1625 Ninth St., Oshkosh, Wis.

WATER LILIES, ORNAMENTAL Water Plants, Berry-bearing shrubs and Plants for attracting birds, etc. Write Terrell's Aquatic Farm, 1006 W. Blk., Oshkosh, Wis.

TREES AND SHRUBS FOR ORNAmental and landscape planting. Write us for lists and prices. American Forestry Co., Pembine, Wisconsin.

NATURE LOVERS DEDICATE ROCK OF GIBRALTAR

APPROXIMATELY 800 Madisonians attended the dedication of Gibraltar rock, Columbia county, conducted Sunday afternoon by the Friends of Our Native Landscape. A portion of this valuable rock came into the possession of the society recently through the generosity of the Richmond family of Madison.

The program, which was presided over by Ernest Warner, was opened by a song under the direction of Prof. E. B. Gordon.

Dean H. L. Russell of the college of agriculture talked on the scenic wealth of Wisconsin and stressed the growing necessity to conserve the natural beauty of the state.

Tells Rock's History

An early history of the rock given by Winfield Scott, who has lived in its near vicinity in Columbia county. He told of the early celebrations which were held at this historic spot.

Gilbert Richmond, former owner of the property, gave a short talk and presented the title of the land to the society. John S. Donald of the agriculture college gave a brief address.

Senator Robert Caldwell, Lodi, talked on Coumbia county and its history. William Mauthe, Fond du Lac, chairman of the state conservation commission, was also a speaker.

Founder Speaks

Jens Jensen, Chicago, founder of the Friends of Our Native Landscape, addressed the members and their guests with a history of the organization and its growth.

Following the program a picnic supper was served.

The rock, which has become famous in the history of the state, rises above the plains below for nearly 600 feet and can be seen for miles around. It has been called Gibraltar rock for about 75 years, and has been so named because of its strange resemblance to the mighty Gibraltar which guards the gateway to the Mediterranean.

3 Acres Included

The resemblance is most apparent when viewed from the river from Lake Wisconsin. On this body of water, particularly in the early evening, it is said that one might well imagine himself approaching that traditional and historical stronghold of Europe.

The property which Mr. Richmond has given to the society includes 13 acres on the top of the peak and is to be known hereafter as Richmond Memorial park. It was dedicated to the history and tradition of the pioneers.—State Journal.

PLANTING OF TREES SETS NEW RECORD

MORE trees were planted in Wisconsin parks during the last month than in any entire year in the history of the state's reforestation movement, acording to C. L. Harrington, superintendent of forests and parks.

Altogether, there were 1,690 acres of trees planted in five state parks. More than 1,500 of these acres are in Northern Forest park, in which is located the state nursery at Trout lake, Devils Lake, Nelson Dewey, Brule, and Peninsula State parks were also improved but the acreage of trees planted was smaller in each.

Extensive Movement

"May planting this year is the beginning of a more extensive forest restoration movement in our state parks," Harrington said.

"We intend to carry on a continuous forest planting experiment this summer and fall. About five acres of trees will be planted every two weeks through the summer and fall months, to find out just what period of spring, summer or fall is best adapted for forest planting.

Similar Areas

All of this planting will be done in similar areas. Trees will be planted in furrows, just as they are in large scale forest planting operations.

Besides the extensive work in state parks and other state owned land this spring, more than 1,500,000 trees were shipped from the state nursery to be planted by individuals, schools and other organizations. —State Journal, Madison.

TABLE OF CONTENTS

	Page
State Garden and Flower Show	323
Strawberry Day at Warrens	327
The Bayfield Meeting	329
Small Fruit Meeting at Menomonie	329
Dahlia Diseases and Insect Control	331
Alyssum	331
Ageratum—Floss Flower	331
Rose Disease Control	332
Horticultural News by Sec'y Yeager	333
Clearing House for Potato Marketing	333
Door County Fruit Growers Union	334
Editorials	336
The Best Iris	336
Strawberry Grading	338
Raspberry Beetle	338
Tests with Mulch Paper	338
Do You Know Cantaloupes	339
Triumphs Introduced in 1878	339
Garden Club Federation News	340
Notes on Flower Show Exhibits by Committee Members	343
Winners of Garden Club Projects	344
Premium Awards	344
Hay Fever Misnomer	347
Handy Orchard Ladder	348
Home Grounds Contest in La Crosse Co.	349
Dedicate Rock of Gibraltor	350
Planting of Trees Sets New Record	350

Headquarters for
Potato Sprayers and Dusters
Dust and Spray Materials

Calcium Arsenate
Bordeau Mixture
Nicotine Dust
Bordeau Dust

Orchard Harvesting Equipment

Ladders
Picking Bags
Small Baskets

F. R. GIFFORD CO.
2201 University Ave.
Madison, Wis.

HARDY PERENNIALS

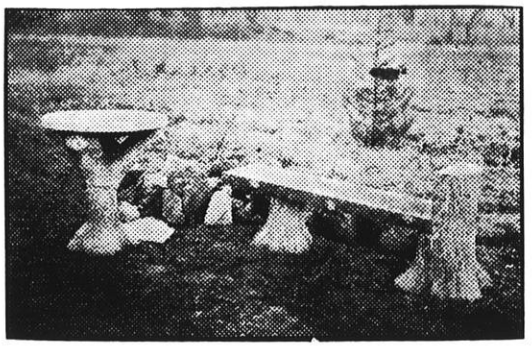
New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List



RUSTIC GARDEN FURNITURE

Made by the

Rustic Garden Furniture Works
1535 Western Ave.
Janesville, Wis.

Try Our Special Selected Sweet Scented Hybrid Lupines

One Dozen $3.90 post paid

We specialize in Perennials

Send for our new illustrated Catalog

Chequamegon Flower Gardens
V. E. Brubaker, Prop.
Washburn, Wis.

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which describes dainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

Plant Iris NOW

I grow iris because I love them. I grow them in quantity because I like to introduce this charming flower to other garden lovers who may not appreciate the recent improvements that have been made in it in color, form and growing habit.

My catalog accurately describes over 200 varieties, classified as to color—it includes the old standard sorts that still hold their high ratings, as well as the newer introductions that reveal new beauty of tone, of carriage and of garden effect.

Now is the time to plant iris to assure maximum bloom next spring. Ask for my catalog and make your selections this month.

Wisconsin Garden Club Collection

In a special effort to add a welcome feature to Wisconsin gardens (already known for their excellent plantings) I will select and label 10 iris of a wide range of color—all well rated—and send them postpaid if you will send me $3.00 and **mention this magazine.** The selection of varieties must be left to me but I'm enough of an enthusiast to guarantee that you won't be disappointed. Ten single roots of ten different varieties, postpaid — that hardly pays for digging and labelling them!

R. Marshall 2253 N. La Salle Gardens, **Detroit, Mich.**

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN

WISCONSIN HORTICULTURE

AUGUST

1929

Vol. XIX

No. 12

EVERGREENS
Native Rhododendrons

Broad Leaved Flowering Shrubs for all around beauty. Write for illustrated price list. Now booking fall orders.

TENNESSEE EVERGREEN CO.
P. O. Box 575
Elizabethton, Tenn.

BARGAINS

100 finest Gladiolus Bulbs $2.00 F. O. B. or $2.25 postpaid, 10 varieties 10 each. Spring delivery.

30 popular Iris roots, 5 each 6 kinds for $2.25. Postpaid April—July—August delivery.

6 Peony roots, 2 red, 2 white, 2 pink for $3.00 postpaid. Sept.—Oct. delivery.

STONECREST GARDENS
Eau Claire, Wis.
Send for catalog. It's free.

Fig. 1 Fig. 2 Fig. 3

Berry Boxes
Crates, Bushel Boxes and Climax Baskets

As You Like Them

We manufacture the Ewald Patent Folding Berry Boxes of wood veneer that give satisfaction. Berry box and crate material in the K. D. in carload lots our specialty. We constantly carry in stock 16-quart crates all made up ready for use, either for strawberries or blueberries. No order too small or too large for us to handle. We can ship the folding boxes and crates in K. D. from Milwaukee. Promptness is essential in handling fruit, and we aim to do our part well. A large discount for early orders. A postal brings our price list.

Cumberland Fruit Package Company
Dept. D, Cumberland, Wis.

White Elm Nursery Co.
Hartland, Wisconsin

General Line of
Ornamentals and Fruits

Dahlias—Gladiolus—Perennials

4 good Dahlias (named, labeled)	$.75
100 Gladiolus (1 inch, assorted)	1.00
1 doz. perennials (assorted, labeled)	1.25
Or, entire list above, postpaid for	2.25

May we send you our price list?

DEWALT'S FLAMBEAU RIVER GARDENS
Ladysmith, Wisconsin

An Invitation

Pay us a visit this Summer, while our garden beauties are at their best. You will enjoy a few hours among the Trees, Shrubs, and Flowers growing in our nurseries. And the selection is more complete and better than ever this season.

RASMUSSEN'S
FRUIT FARM AND NURSERIES
Oshkosh **Wisconsin**
On Highway 21

Mr. and Mrs. J. T. Fitchett

invite you to visit the

Fitchett Dahlia Gardens

735 Milton Avenue

Janesville, Wisconsin

"At Home"
from August the fifteenth until frost

Wisconsin Horticulture

Wisconsin
State Horticultural Society
Organized 1865

Devoted to better fruits, flowers and vegetables

OFFICERS

President
C. J. Telfer, Green Bay

Vice-President
M. B. Goff, Sturgeon Bay

Secretary
H. J. Rahmlow, Madison

Cherry and Apple Growing Problems Discussed at Meeting

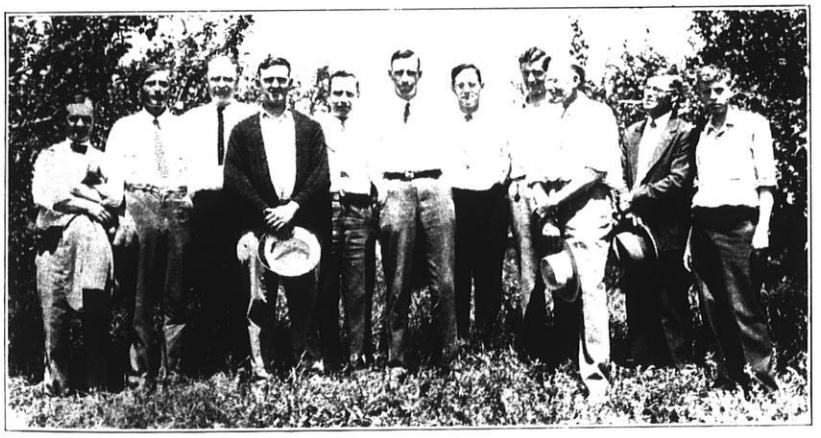
Growers and Investigators Tell of Cultural Methods, Disease and Insect Control at Sturgeon Bay

THE summer meeting for fruit growers held at Sturgeon Bay July 12-13 in cooperation with the Door County Fruit Growers Union, the Door County Chamber of Commerce and the County Agent's office proved to be one of the most instructive and interesting meetings ever held by the Society.

The tour was very well arranged, the majority of this work having been done by the County Agent B. F. Rusy who lined up the different orchards visited on the tour.

Friday forenoon was devoted to inspecting the Fruit Growers Union canning factory at Sturgeon Bay. Cherries were not yet ripe enough to be canned but the machinery was all ready for the canning season which was to open the following week. Visitors were taken from one machine to another and the details of operation explained by Mr. W. Lawrence of Sturgeon Bay, who is one of the directors of the Union.

The factory has machinery for canning one million pounds of cherries per day. Probably the most interesting machines in the factory were the pitters which take the pits out of cherries.



GROWERS AND SPEAKERS AT FRUIT MEETING

Left to right: R. H. Roberts, Nick Jacobs, B. F. Rusy, Don Reynolds, A. A. Granovsky, Earl Johnson, Moulton B. Goff, D. H. Palmiter, A. H. Lawrence, D. E. Bingham and M. H. Bingham.

The tour on the afternoon of the first day took up cultural problems of apples and cherries. The first stop was on the farm of W. E. Larson near Sawyer. Here heavy producing, old Richmond trees were seen. Prof. R. H. Roberts pointed out that the reason why this orchard was giving such a good yield was due to the fact that strong new wood enabled the trees to produce a maximum crop. This new wood was due to good cultural conditions which included fertilization with nitrate fertilizer, spraying, clean culture in the spring and during the dry season and a cover crop in the fall. Plenty of fertility and moisture produces new wood which in turn produces a good crop of cherries. On the other hand, poor growth and poor cultural conditions weaken the tree and often times result in winter injury and other types of trouble.

The second stop was on the farm of A. W. Lawrence. Prof. Roberts explained the method of pruning young trees to the type called the "modified central

leader." This type of pruning results in good strong lateral branches with fruiting wood and a good cherry crop. Mr. Lawrence has a very fine orchard which was in excellent condition and gave promise of a good yield.

Prof. A. A. Granovsky investigating insects in Door County orchards.

The third stop was on the farm of W. E. Lawrence where a fine block of trees were seen which were outstanding for their consistent production. Here also attention was called to the good cultural conditions used which resulted in the production of new wood with a good crop of cherries.

Tree Shading Experiment

The next stop was on the farm of Edward and Lawrence Squier. Here Dr. R. H. Roberts is carrying on an experiment to determine the effect of shading trees on the "set" of cherries. A number of trees had been shaded with a burlap canopy over the top. The burlap came down somewhat on the sides, enough to shade the tree but to leave room for plenty of insects for pollination. The results were quite surprising. The trees that had been shaded bore practically no cherries at all. Blossoms had been counted on a number of branches on the different trees and a tag attached bearing the number of blossoms the branch contained. One branch about two and one-half feet long had 90 blossoms at blossom time and only one cherry matured. Another branch about two and one-half feet long had 244 blossoms with no cherries at all. Adjoining trees, unshaded, had a normal crop.

This experiment demonstrated that the "set" of cherries is associated with the weather condition. It was maintained that bees have very little to do with the pollination of cherries and that in many cases where cherries fall off of the tree, they actually were pollinated before they fell. Sturgeon Bay growers claim that if it were necessary for bees to pollinate cherry blossoms, Door County would have a very small cherry crop because there are very few bees in that section.

The next stop was on the orchard of Ed Martin where the effect of sweet clover which had been left growing too long in a fairly dry season, was seen. The orchard contained trees all of the same age, but one block appeared to be about two years younger than the rest. The small trees had been stunted by a sweet clover crop having been left growing during a dry season, while in the section containing the larger trees the sweet clover had been disced in and the soil cultivated to form a dust mulch during the dry weather. It was pointed out that during a season of plenty of rainfall it is all right to leave the sweet clover growing but when a drought comes it is very important that the dust mulch be maintained and the soil thoroughly cultivated.

The Largest Orchard

The next stop was in the orchard of the Martin Orchard Company. This orchard contains 730 acres. Mr. E. L. Johnson is manager. About 30 acres in the orchard are apples, the rest being in cherries. It contains about 60 thousand trees. Mr. Johnson had arranged a demonstration of some of the large machinery used in the orchard. A "Rex Liqui Duster" manufactured by the Niagara Sprayer Company gave a demonstration on the application of "liquid dust." Air blown through at a rate of 175 miles per hour forces the spray onto the trees. Mr. Johnson stated that the machine gives very good results.

A 17 foot tractor disc pulled by a Caterpillar tractor and a 17 foot harrow were also shown in operation. These machines thoroughly cultivate the soil between the rows of trees. Large capacity machinery is essential in a large orchard.

On the farm of Mr. Wm. Kinnaird, the next stop, Prof. A. A. Granovsky spoke on the "cigar case bearer." This insect excavates a small hole into the inside of the leaf. It forms a case

B. F. Rusy, County Agent, Door County, who had charge of the tour arrangements.

about itself looking very much like a tiny cigar. It is about one-fourth of an inch long. The fact that it excavates inside of the leaf makes it very difficult to control by spraying. It never leaves its case which it always attaches to the lower side of the

leaf. Prof. Granovsky has been working on the control of this insect for some time. He recommends a pre-blossom spray which is at the weakest stage of the insect's life and is during the time it is laying its eggs. One and one-half to two pounds of arsenate of lead to 50 gallons of water as a pre-blossom spray was recommended. An application after the cherries have been picked should also be made.

The Reynolds Canning Factory

The next stop was on the canning factory of the Reynolds Brothers which is a very fine plant. Every machine was in spotless condition and ready for the coming canning season. The grounds were attractively landscaped and the buildings in well kept condition. A demonstration was given in the orchard of the system of bracing trees used by the Reynolds Brothers. Old cherry trees develop branches which may split the trunk under a heavy load. A staple is driven into the main branches of the trees and wires attached which are brought together in the center and fastened to an ordinary harness ring or washer. Karl Reynolds demonstrated that this system was so strong that he could stand on the group of wires without any damage.

The next stop was in the Sam Goldman orchard. Here 12 to 14 year old trees were seen which were bearing very heavily. A big crop of sweet clover had been plowed under when the trees were young and about 4 lbs. of sulphate of ammonia used per tree. Mr. Goldman also took the crowd to a young orchard which he had just set out and in which there was sweet clover about five feet tall. He is leaving this sweet clover go to seed which insures another crop for the coming year. He digs a space around each tree about eight feet in diameter to help conserve moisture about the tree. The sweet clover provides plenty of humus for the soil. If the season becomes very dry the clover should be plowed under. He also took the visitors to another orchard where a paper mulch experiment was being carried on. Two sheets of paper three feet wide and six feet long had been placed around the tree. The edges had been covered with soil to keep the paper from being blown away by the wind. The cost of the paper was estimated at 9c per tree. It keeps the quack grass and weeds from growing around the trees and conserves moisture. Whether or not it is a good method has not yet been determined.

Inspecting a double disc attached to a caterpillar tractor covering entire width between two rows of trees.

The Evening Banquet

A very fine banquet had been arranged by County Agent Rusy at the Bay Shore Inn. Visitors were the guests of the Door County Chamber of Commerce. Mr. M. B. Goff acted as toastmaster in the absence of President Telfer and called upon a number of visitors and local fruit growers.

Mr. Karl Reynolds spoke for the Chamber of Commerce and welcomed the visitors. Mr. H. W. Ullsperger, manager of the Door County Fruit Growers Union, told of the cherry industry and the marketing problem confronting farmers. He said that there were 6600 acres of cherries in Door County and 2100 acres of apples. In the past ten years the cherry crop has had a value of 9 million dollars as 94 million pounds have been harvested.

Prof. R. S. Mackintosh, Secretary of the Minnesota Horticultural Society invited the Wisconsin growers to attend the Minnesota summer meeting and also the convention to be held next November at Minneapolis.

Secretary H. J. Rahmlow spoke briefly of the work of the Horticultural Society stating that during the present summer five special meetings have been held in various parts of the state for fruit growers, strawberry and raspberry growers and garden clubs.

Mr. Stevens of Milwaukee representing a paper mulch concern spoke on the value of paper mulch in fruit and vegetable growing.

Following the banquet the Executive Committee of the Horticultural Society met in the office of the Fruit Growers Union to conduct their regular business. The Secretary made a financial report showing the Society to be in good financial condition.

Mr. N. A. Rasmussen of Oshkosh invited the Society to hold its winter convention in Oshkosh. The invitation was accepted.

Plans were also made for a system of honoring horticultur-

(Continued on page 379)

Variety Tests of Strawberries

H. H. HARRIS
Warrens, Wis.

I AM sending chart showing the strawberries I picked from one half rod rows I had staked off at time of the meeting at Warrens. I found that a good full quart of strawberries weighed 18 ounces and of the small amounts shown on the table the figures are from actual weights in ounces and the larger numbers were from measure in quart baskets.

At the request of several growers on the annual strawberry tour at Warrens on June 15, Mr. H. H. Harris agreed to stake off rows of equal length and weigh the berries picked from these plots. The table gives the results, in which strawberry growers will be interested.

1928 Date of pickings	WARFIELD Fertilized with Darling S. B.	WARFIELD Treatment Acid Phos.	DUNLAP Treatment Acid Phos.	BEAVER Treatment Acid Phos.	PREMIER No treatment Acid corded	RED GOLD Treated to Acid Phos.	OSHKOSH Treatment Darling S. B.	BRICO Treatment Acid Phos.	HERITAGE Treatment Acid Phos.
June 21	1	2	2	2	3				
June 24	16	16	13	12	13				
June 26	16	14	20	14	20				
June 27							24		
June 28	23	21	22			20		20	
June 29				27	37				
July 1	41	36	36	24	36	38	41	26	24
July 3				20	27				
July 4	36	28	36			27	36		
July 5				18	18			42	
July 6	14	7	7			10	28		36
July 8	12	15	10	40	36	5	9	24	24
July 10				18					
July 11					20			13	11
Total	159	139	146	175	210	100	138	125	95
	11,264 qts per A	9,856 qts per A	10,368 qts per A	12,316 qts per A	14,848 qts per A	7,040 qts per A	9,728 qts per A	8,960 qts per A	6,784 qts per A

REMARKS

Warfield, Dunlap, Premier and Beaver each had a ripe berry first on June 18th.

Figures used are 1/18 of a quart, or ounces picked from ½ rod of row on date indicated.

Oshkosh is later than Dunlap and leaves so badly rusted that berries wilted instead of ripening.

Red Gold very small after first picking.

Through picking for market July 11, but still some nice berries on Warfield, Dunlap, Beaver and Premier and will be for quite a while on Heritage. Brico too soft to pick without bruising.

Foliage of Premier as bright today as new vines.

We have picked a fairly good crop from the whole patch, especially the Warfield, Dunlap, Premier and Beaver. Some parts of the field I think were better than the pieces staked out and some not quite as good. So it is difficult to determine whether the application of the soil builder or the phosphate was any improvement.

The Premier gave us the most large handsome fruit, although the Beaver gave some fancy berries.

In determining the yield per acre I multiplied my figures by 1280 as our rows were set four feet apart.

On account of the frost on the low land followed by the hailstorm, the shipment from Warrens was less than usual and prices were not as high as last season.

THIS SOMETIMES HAPPENS

Wausau, Wis., June 18th.

Editor of Wis. Horticulture:

Having been a reader of Horticulture for many years, I feel at home to air ill feelings even when my friends get 'stung.' I am writing this letter for Mr. Walt. Emmrich of Hamburg, Wis.

He purchased 2 bu. of Red River Ohios and 3 bu. of Irish Cobbler potatoes from the Berry Seed Co. of Clarinda, Iowa, as certified seed labeled northern Wis. grown. Upon their arrival the stock looked good 'on top' for freight house inspection. But when planting time came and the potatoes poured out of the sacks, a different view presented itself. The Red River Ohios had deep eyes, the grade for size was everything from hen's eggs to large Wolf River apples for comparison and for quality they were scabby, rotten, and worm eaten. About three pecks of the five bushels were bad.

Nothing can be done about it, but this letter can be placed on file for future reference, when the potato growers get busy to fight unscrupulous dealers when they try to palm off scrubs for Wis. Certified Potatoes. If you wish to print this letter you may do so.

Respectfully yours.

A. H. LEMKE, D. D. S.

Unfortunately nothing can be done if the seller is not reliable. Therefore we suggest our readers buy only from firms having a good reputation.

Otto Liebers and "Mutt" Lawritson were attending a concert in Omaha given by a noted band. They got into an argument as to whether one of the numbers was "Tales of Hoffman" or "Poet and Peasant Overture." Finally "Mutt" agreed to slip around to what he thought was the announcement stand to find out. Soon he returned and disgustedly remarked, "Otto, we are both wrong. It is the 'Refrain From Spitting.' "

How the Japanese Arrange Flowers

MRS. C. V. HIBBARD
Over WHA, University of Wisconsin

IT IS safe to assume that we are all interested in the ever delightful task of gathering flowers from our gardens. It is probably true, also, that we are not always satisfied with the result of arranging the flowers we have gathered.

Do you remember the time when our idea of a bouquet was a tight little bunch of various flowers, tied with a stout string and stuck primly in a golden vase with an angel painted on it? I do.

Well, there is no accounting for taste; what I have learned to love in the Japanese way of arranging flowers may seem to you fantastic and unlovely. Will you give my suggestions a trial at any rate; take just what you want of them. You may find some of the ideas usable in your own home.

Unless one's ancestors back to about 700 A. D. when flower arrangement began, were Japanese, it is difficult to acquire the feeling and instinct for it. Let me give you an example from my own experience. A friend and I went twice a week for about two years to study flower arrangement with a teacher in the school of Koryu, which is one of the many schools there are, over in the land of tea and rice. This teacher brought vase, branches, scissors and all the other things for our lesson. We sat on the shivery floor beside him. He chose each stalk slowly and carefully, and cut it to the proper length with his gay scissors. First the longest, and main branch, which the Japanese call Heaven, or Father or Earth. Then one somewhat shorter, called Man, Mother or Air; and a third still shorter, called either Earth, child or water. These three elements we soon learned must be in every piece of flower arrangement.

When our teacher had deftly and with his pointed, supple fingers, cut these branches satisfactorily, he bent each gently with his hand to give it the curve to satisfy his eye. Then he placed the branches in proper relation to each other in the vase.

Now comes the hour of trial for us. We are told to examine the finished product carefully, to get the feel of it. Then with ruthless hand he tears the branches apart and humbly begs his pupils whom he calls his honorable pupils to reconstruct in the same way. Could you do it? It sounds easy, doesn't it?

Three stalks, or maybe five—for the main three have other stalks—*only* three. Anyone not absolutely dumb ought to be able to do that.

You get the whole idea in a nut shell in the Japanese word for flower arrangement "Ikebana." "Ike" means living and "bana" is "Flower." So we have "living flower." Think of our methods. Study them; see whether or not we aim to reproduce the living plant; or if it is not rather a mass of cut and frail blossoms. I might stop here, and merely ask all of you to judge your next bouquet by this standard. That alone would be a worthwhile fact to learn about flower arrangement. You can't improve on Nature.

You very likely have a bouquet in your living room this very minute. It is probably in a low green glass bowl containing a glass holder with a lot of holes. Let me see what you have in it. Oh, yes, Some lovely columbine, pink, lavendar and red; a lemon lily, a lavendar Iris, a spray or two of Pyrethum. Well and good.

I have one just like that in my living room too. In having it, I have definitely disobeyed one of the Japanese rules which is to *keep all branches or stems together for at least four inches above the surface of the water to form the parent stock.*

The water then represents the surface of the soil from which this parent stock naturally springs. Try this out with some Iris and its leaves. I have seen Camellias which were lovely, arranged this way. I would like to try Delphinuim. I am sure it would be successful.

Another rule is to use only an odd number of stalks, never an even. Three, five or seven. Thus symetry and balance are avoided. I wonder if any of us ever count the number of flowers we put in a vase? Don't we put in until it seems full and then stop?

Let's not neglect the use of branches and leaves in our flower arrangement. Branches are used to suggest Winter. Pine branches are unbelievably lovely in a Japanese vase; no less so are plum and cherry. Branches are sometimes arranged in long sweeping curves to represent the wind.

An arrangement of branches is striking in a large home and has the further advantage of being lasting. A special arrangement of pine, bamboo and cherry bound with a hempen cord is used at every gateway in the New Year's Festival.

We do not need to be told to use fruits, yellow leaves and berries in the Autumn, for we love the Autumn colors and make good use of them. One suggestion, however. The Autumn arrangement should be very simple, typifying Peace.

The Japanese uses leaves for his summer decorations,—cool, green leaves. He puts these in shallow vases which show much of the water. It is surprising how lovely just plain Aspidistra leaves are in Japanese style. Morning glory leaves are lovely too.

A ragged, torn edge of a leaf is considered an interesting feature, or a curled up portion which they have pinched together to suggest the home of an

insect. Have all these possibilities of using living, growing plants occurred to you?

Spring decorations are made from flowers. The Japanese that he may enjoy the pleasure of seeing the flower come to perfection; perhaps while away some tedious hours in watching the bud become a bloom.

There are hosts of flowers in Japan to choose from. Wild flowers abound in the mountain sides. Around our door yard on the mountain side in Kamizawa we counted eighty-six kinds of wild flowers. One of the most interesting was the Tsuki-mibana, or Moon-Seeing-Flower. One of the loveliest was the heavily scented mountain lily.

Now you see how any kind of plant, practically, lends itself to clever arrangement. What shall we put our flowers in? How shall we choose our vase? Isn't this where we make our gravest mistake? We really have made great improvement in this line.

Most vases in Japan are made of the roughest and coarsest pottery, dull brown or grey. These have good heavy bottoms so that they won't tip over. The contrast, then, between the vase and the flowers is charming.

Instead of holding the center of the scene, our vases should serve only to enhance the loveliness of the flowers they contain. The old brown cookie jar from grandmother's pantry is quite the thing for Autumn bouquets.

Pots and wooden tubs are used for flowers, shrubs and dwarf trees. I have seen large wooden Japanese pickle jars bound with bamboo hoops, varnished and adorning some grand entrance in a fine home on Fifth Avenue, New York.

Bamboo makes adorable vases, but is not very durable in this country. There are many interesting shapes. A tube, with one, two or three holes for flowers. A square hanging basket or bucket. A crescent moon makes an interesting vase. Boats of all kinds, fishes and insects.

The Japanese have discovered beauty in a knot of wood. A fruit basket, in our possession, is a gnarled root of a tree from Mujajima. It never fails to get a word of appreciation. These knots are used for vases also. Sometimes they are decorated with tiny bronze ants, or a silver spider's web with a bronze spider. The variety of vases is endless and extremely interesting.

Now just a hint about our hanging vases. They seem very popular here just now. Some are Japanese and some are Itailian. In a Japanese house they are fastened on a partition, most often near the place of honor in the room, always half way between the ceiling and floor. If yours isn't at that height, try it in that position and see if it is improved.

How do you keep your flowers upright in your vases? Sometimes we try to make the vase hold them up, but that is a disappointing effort. Vases aren't made to hold flowers upright. You have pottery turtles, frogs or glass holders. Let me tell you how I learned to do it from my Japanese teacher. I take a piece of green wood, cut to fit snugly in the vase I am using one inch from the top. This is slit lengthwise, a little to one side of the middle, for about an inch. At the end of this slit we made a notch through the back on the thinner side and bend the stick back on that notch.

You now have a crotched stock with an adjustable hinge. Supposing you want to put in a single stem. All right. Open the crotch a little way and put the stem in. If you have a large number, the crotch can be opened wide enough to hold them. You will find your flowers secure, no wobbling or falling over. It is an indispensable part of arranging flowers, in our experience. Here again the Japanese use their ingenuity, as I hope we will use ours.

No stick handy, no bronze turtle or frog, no contrivance for holding the flowers, what do they do? Here their scissors come in handy. The handle where the thumb holds on, will do to hold the flowers. Or a bit of chain may be coiled in a circle and serve the purpose. We can work out our own, though nothing is so good as the wooden stick.

Now you will agree with me that we have some things to learn from the Oriental in matters artistic. Our hurrying, nervous American habit of mind could profit by the cultivation of the leisure and calm necessary to produce carefully and successfully, as the Japanese do, something beautiful and artistic. The doing of it would be a mental discipline; the thing accomplished will be a pleasure to the eye and the artistic sense.

WE APPRECIATE THIS

A LETTER from Mr. W. R. Soverhill of Tiskilwa, Illinois, president of the Illinois State Horticultural Society, reads as follows:

"Enclosed find one dollar for a membership in Wisconsin Horticultural Society. I enjoy Wisconsin Horticulture very much. It is a credit to your State Society. I was delegate to your Eau Claire meeting and met some of your growers and extend heartfelt greetings to the Wisconsin State Society."

Romance Still Lives

Wanted by a bachelor of middle age, to correspond with lady or widow of same age, with idea in mind of entering poultry business.—Ad in a Montana paper.

George: "Why don't you advertise?"

Town Storekeeper: "No siree, I did once and it pretty near ruined me."

George: "How's that?"

Town Storekeeper: "Why, people came in and bought dern near all the stock I had."

Poison Ivy, What It Is and How to Destroy It

A. L. STONE
Wis. College of Agriculture

WERE you or any of your wives or friends ever compelled to lose several days of valuable time and suffer intense pain and much inconvenience because you came into contact with the plants of Poison Ivy? If so you know what it means. If not, and you happen to be susceptible to poisoning by this plant, your time may be coming soon.

There is no way of determining how many hours of valuable time have been lost, how much irritation and pain has been suffered and how many doctor's bills have to be paid as results fo poisoning by this plant, but the total would probably stagger us.

The Poison Ivy belongs to the sumac family. The scientific name of the plant is Rhus radicans. A closely related species known as Rhus vernix or Swamp sumac also is poisonous, but, as its name indicates, it grows in low ground in swamps and along streams and people are not so apt to come into contact with it. While it should be avoided it is not nearly so serious a pest as Poison Ivy.

Range. The Poison Ivy is found on the North American continent from Novia Scotia in the east to British Columbia in the west and south to Florida in the east and Utah in the west.

Habitat. These poisonous plants seldom cause any trouble in cultivated fields but are common in groves, along roadsides and in parks and cemeteries. In the latter two locations they are sources of severe poisoning to hundreds of people annually.

Character of Poison, and Remedies. The plant is very poisonous to many people. The toxic or poisonous element is contained in all parts of the plant but is most abundant in the leaves. It consists of a non-volatile oil on which water has no effect.

The oil can be removed from the skin by *the use of alcohol* and if this is done soon after poisoning takes place it will prevent the spreading which is almost sure to occur if the oil is not removed.

Where it is impossible to apply the alcohol in time, a quantity of *sugar of lead* may be dissolved in alcohol and the cream-like paste applied to the affected part. This often will prevent further spreading and relieve the irritation, though sometimes it fails. If remedies are not readily available and quickly applied the poison penetrates the skin and causes great swelling and extreme pain. The application of *powdered aristol* freely to the affected parts has been found the most effective of any remedy yet tried in reducing the swelling and relieving the pain. In all cases of which the writer has knowledge, relief has been immediate and complete recovery a matter of three or four days. Cases have been known where those poisoned have been incapacitated for from two to six weeks. So it is well to remember this remedy, *aristol.*

The leaves of the Poison Ivy are three parted, being slightly cut or indented on the edges. Many people are needlessly poisoned by it because they confuse it with the harmless Virginia Creeper. There is no need for this confusion because the Virginia Creeper leaf is five instead of three parted and the fruits blue instead of white. The flowers of the Poison Ivy are green and inconspicuous, borne near the tops of the stems in the angles between the leaves and the stem. Later, a small whitish colored fruits about one-fourth inch in diameter appear which often remain on the stems until well into the winter. The fruits are eaten by birds, and distributed in the droppings in this manner which explains the prevalence of the plant along fences, in the edges of groves and around shrubbery in parks and cemeteries. It is perennial and spreads by root stocks as well as by seed.

The plant varies greatly in its appearance. Sometimes it takes the form of an erect shrub from a foot to two and one-half feet in height. At other times it has a vine-like appearance trailing over the ground or other shrubbery. Again, it may climb to the tops of tall trees by means of small aerial rootlets by which it attaches itself to the tree's branches.

In private grounds, parks and cemeteries it almost always takes one of the first two forms which makes it possible to get at in order to destroy it.

Methods of Eradication. These must be adapted to circumstances and will depend on the size of the area infested, its relation to other vegetation which the land owner does not wish destroyed, and other similar factors. To eradicate this plant requires not only the destruction of the green portions above the ground but the running underground parts by which it spreads and propagates. The work of destruction can be done safely only by a person who is immune to poisoning by the plant. Men who are not poisoned by it can generally be found in every community.

Small patches may be killed by cutting the ivy close to the

(Continued on page 381)

Varieties and Types of Gladiolus

L. A. BURMEISTER, JR.
Milwaukee Horticulture Society

FROM a lowly beginning, hundreds of years ago in South Africa, the modern gladiolus is now recognized in America as the foremost flowering bulb. Many of the leading plant experts have devoted years of their lives to the improvement of this noble flower. The gladiolus is loved by all who grow it and one prominent grower has christened it the Glory of the Garden.

Colors and Types of Gladiolus

To the average amateur the name of a gladiolus does not mean anything unless he knows the color, type and manner of growth. By visiting gardens, observing the glads at shows and in one's own garden, one soon learns to know each gladiolus as well as he knows the name of each rose in his garden. The following is a list of well known and popular varieties according to color, which should have value, when planning a garden for next summer.

Light Pink

Wilbrink
Mona Lisa
America
Dawn
Gains Nymph
Maiden's Blush
L. M. Foch
Pearl of California
Rita Beck
Pink Wonder
Gladdil Boy
Mrs. Dr. Norton
Amil Lauril

Deep Pink

Longfellow
Gretchen Zang
Los Angeles
Pauline Kunderd
Catherine Coleman
Hazel Dawn
Salmon Pink
Everlyn Kirtland
Mrs. Leon Douglas
Richard Diener
Tycko Zang
Jewell
Jenny Lind
Van Fleet

Blotched Pink

Pendleton
Mrs. W. E. Clark
Mrs. Bothin
Sophie Fischer
Twin Fires
White
Albania
Tiffany
Marie Kunderd
Carmen Sylva
Peace
Ruffolace
Early Snowflake

Dark Red

Black Joe
Black Pansy
Joe Coleman
Empress of India
Mrs. Watt

Red, Scarlet and Crimson

Crimson Glow
Dominion
Red Emperor
Ida Vor
Illumiator
Alma Gluck
War
Princeps
Dr. F. E. Bennett

Yellow

Schwaben
Prim. Queen
Primadonna
Satellite
Butter Boy
Butterfly
Flora
Kunderd's Yellow Wonder
Golden Frills
Golden Eagle — Golden Measure

Violet

Baron Hulot
Kirchoff's Violet
New Violet
Jap Lady

Rose

American Beauty
E. J. Shaylor
Rose Miss
Rose Glory
Peach Glory

Orange

Ethelyn
Orange Glory
Sunnymedl
Orange Queen

Types

The commercial or florist's type, the exhibition type, the Primulinus type, the primulinus grandiflorus type and the landscape type. The first two are well known by the amateur.

A blue bowl of deep yellow primulinus gladiolus with a few of dark orange makes a lovely luncheon table decoration. Primulinus Primadonna or primulius species and the gladiolus Priscilla Alden with a few sprays of Delphinium Belladonna form a beautiful center piece for table decoration.

The primulinus grandiflorus varieties have larger blossoms than the others and are a little more open in flower, but have the hooded effect. They are a little more widely spaced on the stems than those of primulinus type. The last type mentioned and which the amateur should know much about, is the landscape type. I call landscape planting, painting with flowers, because planting gardens in colors should be done as carefully and as artistically as an artist would paint a picture. The primulinus gladiolus is the best adapted for this type of planting. A landscape gladiolus should be strong enough to stand erect in all kinds of weather. The small flowered gladiolus stand up better than the large heavy blossomed kinds. We must have endurance of colors in a landscape gladiolus. It must not spot in rain nor fade in the sun. It is not well to have too many blooms open at once, or the length of display will be short. Following is a list of gladiolus suitable for planting in masses or in large clumps.

Primulinus species, deep yellow and very graceful. Alma Gluck is very beautiful. Sunnymedl in orange masses, lovely Alice Tiplady stands up well and has a good foliage. Ethelyn is a fine orange yellow and has several blooms to one bulb. Neoga, splendid dark red, very vigorous. Los Angeles has many blooms and lasts a long time. Lovely pink, Albion, Florecens, Kokomo, Golden Swallow, Dorothy Wheeler and Maiden's Blush are all good landscape types of gladiolus. Harmonia, wonderful substance, Selfsalmon in color.

Of the above mentioned gladiolus, I have the following in my garden, 100 or more of each. Saint Nymph, L. M. Foch, Gretchen Zang, Los Angeles, Catherine Coleman, Evelyn Kirtland, Mrs. Leon Douglas, Richard Diemer, Jewell, Mrs. Bothin, Baron Hulot, Mrs. Watt, Crimson Glow, Dr. F. E. Bennett, E. J. Schaylor, Rose Glory, Rose Ash, Golden Measure. Of the above I like them all but I haven't the room to plant them.

Unusual Gladiolus

These unusual gladiolus mostly fall into different new types. These types may be termed the Laciniated, Picotel, Snapdragon, Needlepoint, Orchid, Dracocephalus, Novelty, Miniature and Rose-bud.

The Laciniated, Needlepoint, Snapdragon and Rose-bud types are fixed by their form, whereas the others with the exception of the miniature are distinctive as to color, the miniature being fixed by virtue of its small size.

Lacinatus (Kunderd), Ruffalace (Kemp), Serrata (Bill), and Gold Elsie (Fischer) are excel-

(Continued on page 375)

Gladiolus Diseases and Pests

HURON H. SMITH

GLADIOLUS has always been known as one of the garden flowers that is remarkably free from troubles caused by bacteria, fungi and insect pests. Yet diseases have developed in various sections, that have spread widely to other sections through irresponsible dealers. Desire for better varieties is constantly causing the glad fan to import new varieties.

Scab

The plant diseases most commonly encountered are: scab, also called bacteria spot; stem rot or neck rot; dry rot; hard rot; Penicillium rot and Fusarium rot. Scab causes circular, shallow, brown or black depressions on the bulbs. The surface of the scab is horny or brittle and usually covered with a gummy, shiny, varnish-like substance. It may be removed entirely with a knife point. The bacteria that cause scab, make a sweetish fluid exudation which dries down to make the varnish-like appearance. The bacteria swim around during a rain and infect fresh, healthy gladiolus. Leaves begin to decay and die at the ground line, and often completely collapse, leaving the flower stalk only standing.

Treatment is by formaldehyde, corrosive sublimate or such trade products as Semesan or Uspulun. Results are uncertain with formaldehyde, dangerous with corrosive sublimate, and better with Semesan and Uspulun, organic mercurial compounds. They are used from ¼ per cent to 2 per cent in water. Since the bacteria live in the soil for several years, it is well to rotate crops, using the same ground for glads only once in four years. The advantage of the treatment is lost if planting is done in infected soil.

Dry Rot

Dry rot is the worst of all glad diseases. It looks like black, pinpoint structures on the leaves and stems. On the bulbs, it is also circular, brownish or blackish in color, but lacks the varnished appearance of scab. On the bulbs these lesions often run together and are not so definitely marked out as in scab. This disease also spreads in the soil. The infected plant grows normally for from 4 to 6 weeks, when the tips turn yellow and the plant slowly dies. The disease gives a discoloration as if smeared with tobacco juice. Control is not well developed. Digging up and burning infected plants is recommended.

Hard rot is difficult to distinguish from dry rot in its early stages, and is then only actually distinguished by a combination of microscopical and laboratory examinations. The fungus threads grow deeply into the bulb and do not stay on the surface like dry rot. Control is through sorting and discarding, disinfecting as for scab, and bordeaux spray on the young leaves. Hard rot causes a distinct leaf spot disease on the foliage of seedlings.

Penicillium rot is mostly a storage rot. It was first described during the past year. It seems to depend upon wounds for entry and has been noted where growers use a screen to wash out their bulbs. Penicillium rot is known to us as a sort of mildew. The mold that affects kid gloves is Penicillium. It travels rapidly in the bulbs that are full of water and before they dry out. It goes very slowly in cured bulbs. If a disinfecting solution is used at the time of washing, it will control this disease.

Fusarium rot is another recently described disease. It produces small, red-brown spots with water-soaked margins on the bulbs. It renders the husks brittle. High humidity and high temperature in storage produce it. It mummifies the bulb and produces concentric rings on the surface. It is treated with disinfecting solution as hard rot or dry rot.

CARE OF GLADIOLUS BLOOMS

MRS. WM. H. WEDGEWOOD
Milwaukee

THE gladiolus is the best of all flowering bulbs, all things considered. It surpases all other flowers for cutting purposes and keeping qualities. When cutting, use a sharp knife to avoid bruising the stems. Spikes should be handled and shifted as little as possible and should never be placed in bundles or one spike over another. Early morning is the best time for cutting the spikes.

Cut gladiolus when the first two or three florets are open. Take as long a stem as possible, leaving at least five leaves to develop new bulbs for next year. The loss of foliage is detrimental to the corms.

Each morning remove wilted blossoms and cut off a little of the stem. It is best to cut stems slanting, not just straight across. Keep inside of vases clean. The flowers will last longer if these suggestions are followed. Placing cut gladiolus in a cool cellar over night refreshes and improves them.

If you have not already set out some new iris, do so during August. Some of the very best, such as Ambassadeur can now be bought for 50¢.

"Rastus, I'm sure to hear you buried your wife."

"Boss, Ah jes' had to. She died."

Fruit Prospects in Wisconsin

Growers Report Crop Fair. Scab Has Been a Serious Problem in Some Sections

WISCONSIN will have a fair fruit crop according to reports of some of our leading fruit growers received the latter part of July.

Our president, Mr. C. J. Telfer, writes as follows: "The cherry crop was about the same as in 1928 here in Green Bay. Prospects for apples are good. Our crop will be at least 50% heavier than last year. Dudley, Snow, N. W. Greening, Delicious, Wealthy and McIntosh are exceptionally heavy. There have been few insects this year but there is a little scab on apples. Several growers have had a little trouble with raspberry diseases and insects."

Good Prospects at Gays Mills

Mr. J. J. McKenna of Gays Mills, manager of the Kickapoo Development Company, states that the prospects for apples are good. Wealthy, Snow and McIntosh are showing up best. Diseases and insects have not been very bad but there has been some hail injury and a little fire blight.

Mr. Fred Sacia of Galesville, one of the largest orchardmen of the western part of the state, says that prospects for apples will be fair. Farm orchards generally are bearing but a small crop of scabby apples. The commercial orchards that were sprayed thoroughly with a regular spray program are bearing a fair crop of clean apples.

McIntosh, Jonathan and King Davis are absolutely clean. Delicious, Wealthy and other varieties show a little scab. There has been a little hail damage.

There has been plenty of moisture so apples are running to good even size. Insects were late and did but little damage.

Something hit the Whitney crab which looks like Curculio.

It is quite apparent that the only scab infection this year came about April 25th. Our ten acre plot of Greenings blossomed but did not set. Delicious is our best crop. We have between two and three thousand trees bearing, some with a full load.

FAIR CROP IN GRANT CO.

MR. RALPH IRWIN, large apple grower at Lancaster, Wisconsin, writes as follows: "The apple crop is fair in our section. The June drop was less than usual. We have the heaviest set of McIntosh we have ever had. McIntosh, Wealthy and Tolman Sweet are showing up the best. This is an 'off year' for Greenings and Snows.

Scab is much worse this year than the average but not so bad as in 1927. Curculio always does damage and buffalo tree hoppers are becoming worse. Owing to the heavy scab infection in farm orchards, the local market will be much better than usual."

Mr. A. K. Bassett of Baraboo states that in his section there is about 30% of a full crop. Wealthy, N. W. Greening seem to stand the frost the best. Insects and diseases are not very bad this year. There was a heavy frost on May 19 in the Baraboo section which got a great many of the best varieties.

Big Crop at Menomonie

Mr. Paul Grant of Menomonie, Wisconsin, writes as follows: "We will have between 30 and 35 carloads of apples this year. We understand that the crop in farm orchards is light.

Wealthy, McIntosh and Greening are equally good. Duchess are not as heavy as usual but we do not have many of them.

Fire blight has been rather bad starting from blossom infection.

Our fruit is perfectly clean and of good size. There is no scab on foliage or fruit."

We understand that Mr. Grant practices a very thorough system of spraying which probably accounts for the fact that his fruit is perfectly clean.

WINESAP APPLE LEADS

U. S. Department of Agriculture Survey

IN 12 or the last 15 years, the average farm price of apples has been below the general prewar wholesale price level of all commodities. Millions of trees have been removed and others have been neglected. From 1910 to 1925 the number of apple trees in the United States decreased nearly 40 per cent. Notwithstanding the decline in the number of trees, production of apples has been practically maintained. These are some of the important facts noted by the department in an analysis of the prospects of the apple industry. Recent changes and present tendencies promise a better approach to stability in the industry, but with the number of trees now planted commercial production is expected to continue at a high level for several years.

Though total apple production has declined slightly since 1917, commercial production has steadily increased. Since 1918, carlot shipments have increased at an average of 4,600 carloads a year, and movements by motor truck have grown considerably. Greater production per tree has largely offset the decline in the number of trees. The department expects further increases in commercial apple production in the next few years, accompanied by an increase in the domestic demand resulting from population growth. The rate of increase will be less than it was in the last 10 years.

The future appears somewhat brighter for the commercial grower who is favorably located and who produces apples of high quality at low cost. Conditions in the industry are changing so rapidly, however, that success for the individual grower requires attention to conditions throughout the country, as well as to the technical problems of his own orchard. Apple production is a business in which long views are necessary. The orchard planted today will not return a revenue for from 7 to 10 years. When it starts producing, however, it may be a source of income for 30, 50, or 60 years. In the past this fact seems not to have been sufficiently borne in mind and overplanting has resulted.

In a survey, started by the department, information has been obtained on the number of trees of different varieties and ages in the country as a whole and in different apple-producing sections.

Winesap leads all other varieties in number of trees. Ten per cent of all the commercial trees in the six regions covered in the survey are Winesaps, and three-fourths of them have been planted in the last 18 years. In the Western and Central States the Jonathan is especially important. About 7 per cent of all the commercial trees in the six regions are Jonathan. The Stayman Winesap is of great importance in the Cumberland–Shenandoah Valley, in the Central States, and in Delaware and New Jersey.

Indications are that the production of Jonathans, Winesaps, and Stayman Winesaps can be maintained and could be easily increased. Among the early varieties the Yellow Transparent is of the first importance, it representing about 7.5 per cent of the commercial trees in the Central States. It is rather important in Delaware, New Jersey and Maryland. The Gravenstein is important in California and is grown to some extent in New England. The outlook is for increase in production of early apples for some time, particularly in Illinois, Kentucky, Tennessee, New Jersey, and Delaware.

Different conditions are found in the orchards growing the older fall and winter varieties. The Ben Davis is declining. Planting of the York Imperial have been light in recent years, and plantings of the Baldwin, Northern Spy, and R. I. Greenings have been only moderate. Plantings of Rome Beauty have also been moderate in the last eight years.

More than 800 standard varieties of apples are grown in the United States. In the department's survey New York State reported 241 standard varieties and Michigan 243. This profusion of varieties causes difficulties in marketing and has been a factor in the recent reduction in the number of trees, particularly in the older orchards. A marked tendency toward the concentration of commercial apple orchards in the more favorable sections and a gradual elimination of unprofitable orchards are taking place. These tendencies are accompanied by a drift toward concentration on fewer varieties.—The Official Record.

TULIP BULBS A DUTCH INDUSTRY SINCE 1600

THE tulip has been the most important flower in Holland since about 1600, for it came there by way of Vienna, where it was brought by the Austrian ambassador to Constantinople in 1554, according to John O. Wister, president of the American Iris society and secretary of the Pennsylvania Horticultural society, in a recent speech at the New York botanical garden. Dutch nurserymen soon made the flowers popular and the demand spread throughout Europe, Mr. Wister said.

The tulips brought from Constantinople were few in variety of color, height and season, the speaker continued, but during the last few centuries plant breeders have produced increasingly larger flowers and many new colors. Excellent examples of modern tulips may be seen at the New York botanical garden, where nearly 100,000 bulbs, originally the gift of the Dutch Bulb Exporters' association, bloom every year. Most of these are of the modern garden type, but several wild species from Asia are also included, some of which are only a few inches high and scarcely bigger than a crocus.

The daffodil, which is a native of England, France and Spain, has also been grown commercially in Holland for many years, where an acreage second only to that of tulips is devoted to them, Mr. Wister said. Most of the good garden kinds were produced first by English plant breeders, who subsequently shipped them to Holland. Nevertheless, a few Dutch nurserymen have always made a business of breeding daffodils.

The culture of both tulips and daffodils in the United States is simple, for the bulbs planted in early fall should bloom the following spring. Under congenial conditions the daffodils will increase from year to year, but in most northern gardens tulips will decrease, ultimately dying out unless new bulbs are planted every three or four years.

On a Bayfield strawberry farm, eight rows fertilized with Ammonium sulphate were twice as good as the balance of the field, unfertilized. Acid phosphate alone gave no improvement over the unfertilized rows. This was on light sandy soil, first crop on new breaking.

THE NATIONAL GLADIOLUS SHOW

THE 20th international exhibition and convention of the American Gladiolus Society will be held at Springfield, Illinois August 14th and 15th.

Springfield, the capital of Illinois and the home of Abraham Lincoln is a splendid place for holding this convention. The City has many historical places of interest for visitors.

A number of Wisconsin Gladiolus fans are planning on making the trip to attend the convention and to see the show which is expected to be one of the best ever held by the Society.

Anyone interested should write to Roscoe Huff, Secretary American Gladiolus Society, Goshen, Indiana.

While we are on the subject of Gladiolus, why not organize a Wisconsin Gladiolus Society. The State Horticultural Society will be glad to foster such an organization and help in every way possible.

THE BEAVER A GOOD SHIPPER

WE WERE pleased to receive a box of Premier and a box of Beaver Strawberries by mail from Mr. E. W. Sullivan of Alma Center, on July 2nd. The berries were of wonderful size and uniformity and were shipped in two regular berry boxes wrapped with only a layer of cardboard and paper. Consequently they were pretty badly shaken up in the mail which was interesting for the reason that it showed which of the two varieties is the best shipper.

In this respect we believe that the Beaver has a slight edge on the Premier. Very few if any of the berries were mashed or showed badly bruised spots while in the Premier over 50% of the berries had badly bruised spots. This would indicate that the Beaver is a little more firm. It also is a lighter color and gives the best appearance when fully ripe or when displayed in a store window.

In quality or taste, it is largely a matter of opinion. The Premier would have a slight edge on the Beaver though we surely liked them both very much as evidenced by the way they disappeared in the office.

POTATO SITUATION BETTER

After the disastrous potato situation of last year, the outlook this year is better. July reports indicated a decreased acreage all over the potato districts. The intentions-to-plant reports in March had indicated the same trend. The acreage in Wisconsin is indicated as 18 per cent below last year, and in the United States as a whole 12% below.

The United States potato acreage is now estimated at 3,370,000 acres, or a reduction of half a million acres since last year. This brings the 1929 acreage below the 1927 acreage which was a very successful potato year. The production forecast for the United States is about 380 million bushels, and for Wisconsin 25 million bushels. Since the United States normally consumes 400 million bushels, it looks as though our potato crop will be in a favorable position this year.—Wis. Dept. of Agric. Press Bulletin.

FALL FRUIT PROSPECTS

Crops of tree fruits seem to be light all over the country, according to July reports. The apple yield of the United States will be about 154 million bushels as compared to 185 million last year, according to the estimates. Peaches are a short crop with an estimate of 47 million bushels as compared with 68 million bushels last year. Pears are estimated at 20 million bushels as compared with 24 million bushels last year. Other fruit crops generally show a smaller yield than last year.—Dept. of Agric. Press Bulletin.

POTATO GROWERS TOUR

Annual Summer Tour in State Will Be Conducted From Aug. 5 to 12

SEVEN well known potato growing counties are to be visited by the Wisconsin Potato Growers associations during its annual summer tour, August 5-12. "Spuds" will be discussed from every angle in an attempt to improve the potato industry of the state.

The tour is to begin at the Hancock experiment station of the Wisconsin College of Agriculture, in Waushara county, then continue northward through the potato section. Stops for meetings are to be made at Stevens Point, Waupaca, Antigo, Three Lakes, Eagle River and Rhinelander. Counties which will likely be visited by the delegation include Waupaca, Waushara, Portage, Langlade, Forest, Oneida and Lincoln.

According to J. W. Braun, horticulturist at the state university, the programs will give potato growers a chance to become acquainted with methods of growing and marketing their crop. Several representatives of the state department of agriculture will also go on the tour. E. L. Chambers, state entomologist; Walter Ebling, agricultural statistician; and Walter A. Duffy, commissioner of agriculture, are among those who will likely go on the trip.

Representatives of commercial concerns, such as manufacturers of machinery and spray materials, and railroads are expected to accompany the group of "potato tourists."

Several outside states usually send delegates to these tours. In the past, representatives from Florida, Mississippi, Louisiana, Texas, Alabama, and New York have accompanied the association.

Learning by Observation

A Visit to Eastern Nurseries

IN COMPANY with three young nurserymen and perennial growers, the editor made a very pleasant and instructive vacation trip beginning July the 5th. The main objective of the trip was Painsville, Ohio, which is probably the largest nursery center in America, with Niagara Falls as the trail end.

The party, consisting of Mr. Lewis Hanson of the Flowerwood Nursery, Madison, Mr. Dawson Hauser, son of John Hauser of Bayfield, well known perennial grower, and W. A. Dustrude in charge of perennials and greenhouse work at the White Elm Nursery at Hartland and the editor, left Hartland early on the morning of July 5th. We made excellent time excepting through Chicago. In order to see the beautiful estates on the lake shore before reaching Chicago it was necessary to pass through the city. The lake shore drive through Waukegan, Lake Bluff, Evansville, and Glencoe was very beautiful. However we will never again drive through Chicago if we can avoid the city, which we did on the return trip.

In making a trip of this kind the main highways, such as US 20, are not always the best. If one has a good road map and can locate good concrete or hard surface roads with less traffic, time can be saved, and also driving is much less tiresome.

The country through northern Indiana and Ohio is somewhat similar to that of Wisconsin. A good many up to-date dairy farms were seen but very little fruit until we reached Ohio and New York.

Arriving at Painsville we were astonished at the size of the nursery industry. We were informed that there are approximately 150 nurserymen and plant growers who have inspection certificates for the sale of nursery stock. Some of the largest have as high as a thousand acres under cultivation.

Storrs and Harrison are perhaps the largest. Other large nurseries are Cole, Kohanky, and Kalley Bros. The Wayside Gardens are the largest perennial gardens we have ever seen. They have approximately 300 acres in perennials.

In all we spent three days in this section visiting the different nurseries. The treatment accorded us was very fine. In each case the owner was only too glad to take us through the entire nursery naming different plants and discussing their merits and hardiness.

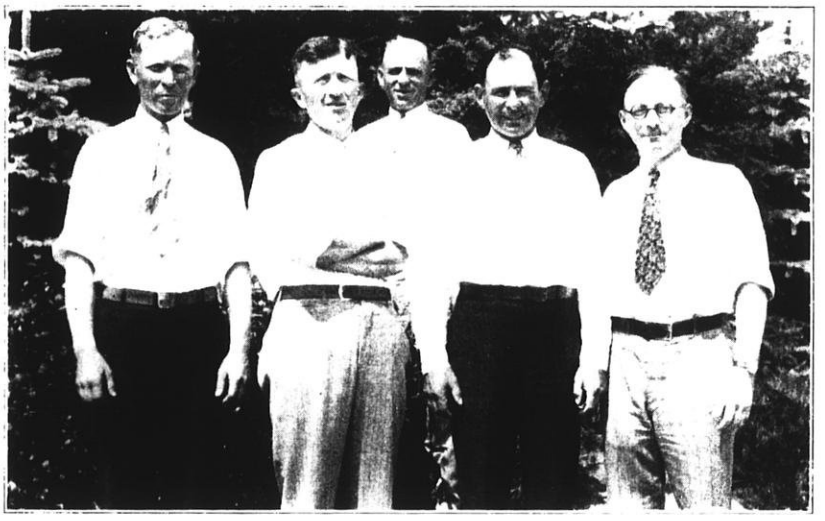
On Sunday, July 7th, we made the trip from Painsville to Niagara Falls. Anyone who has not seen the Falls has a treat in store. No doubt everyone has seen pictures of the Falls. Seeing them as they actually are, one realizes that pictures cannot do them justice. They are simply too immense, either for words or pictures.

To see the Falls it is not at all necessary to spend money hiring guides or making an expensive trip by bus or street car. You can either walk or use your own car, viewing the different scenes at leisure, which is much the better way, and of course the cheapest.

Through New York along Lake Erie we were surprised at the large number of large vineyards. Quite a few cherry, peach and apple orchards may be seen.

On the return trip we went south and west of Chicago making much better time and also had more pleasant traveling.

Nurseries visited were practically all wholesale nurseries and remarkable for their large size in which they far outclass anything in Wisconsin. If we were buying retail, however, we would much prefer buying in our own state.



INSPECTING EASTERN NURSERIES

Left to right: Lewis Hanson, Madison, Flowerwood Nursery; W. A. Dustrude, White Elm Nursery, Hartland; Mr. Kalley of Donewell Nurseries, Painesville, Ohio; Dawson Hauser, Superior View Farm, Bayfield; H. J. Rahmlow, Secretary.

Wisconsin Horticulture

Published Monthly by the
Wisconsin State Horticultural Society
119 E. Washington Avenue
Official Organ of the Society

H. J. RAHMLOW, Editor
Secretary W.S.H.S., Madison, Wis.
Associate Editors—E. L. Chambers, Mrs. C. E. Strong, Huron H. Smith, Prof. J. G. Milward, C. L. Kuehner.

Entered at the postoffice at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

Advertising rates made known on application.

Wisconsin State Horticultural Society

Annual membership fee, one dollar, which includes fifty cents, subscription price to Wisconsin Horticulture. Send one dollar to Office of Secretary, Madison, Wis.

Remit by Personal Check, Postal or Express Money Order. A dollar bill may be sent safely if wrapped or attached to a card.

Postage stamps not accepted

EXECUTIVE COMMITTEE

Ex Officio

President, Vice-President and Secretary
A. K. Bassett.....Baraboo
L. E. Birmingham.....Sturgeon Bay
V. E. Brubaker.....Washburn
H. C. Christensen.....Oshkosh
M. S. Kellogg.....Janesville
James Livingstone.....Milwaukee
Wm. Longland.....Lake Geneva
W. E. Spreiter.....La Crosse
Mrs. C. E. Strong.....West Allis
J. F. Swartz.....Kenosha
H. W. Ullsperger.....Sturgeon Bay

STATE HORTICULTURAL SOCIETY'S 60TH ANNUAL CONVENTION TO BE HELD AT OSHKOSH IN NOVEMBER

State Garden Club Federation Convention to be Held in Connection

AT A meeting of the Executive Committee of the Horticultural Society held at Sturgeon Bay July 12th and 13th, it was voted to hold the 60th annual convention of the Society at Oshkosh either the second or third week in November. The Board of Managers was asked to determine the dates of other conventions which might conflict and set the exact dates as seem best suited.

Mr. N. A. Rasmussen who invited the Society to hold its convention at Oshkosh on behalf of the Oshkosh Horticultural Society and the Oshkosh Chamber of Commerce promised the committee the full cooperation of the Oshkosh Society and assured them that the accommodations would serve every need.

Two programs are being planned, one for tree fruit, small fruit and vegetable growers and also a program which will be arranged by the officers of the Garden Club Federation for its members.

A fruit, flower and vegetable show will be held in connection with the convention and commercial concerns will be invited to make exhibits of horticultural products.

Suggestions for the success of the convention, especially topics to be included on the program and the names of good speakers will be appreciated by the Secretary.

OUTSTANDING HORTICULTURISTS TO BE HONORED AT CONVENTION

AT THE Executive Committee meeting of the Horticultural Society at Sturgeon Bay July 12th and 13th plans were adopted for honoring outstanding horticulturalists for their work.

A committee consisting of the Board of Managers of the Society and Dr. R. H. Roberts of Madison, Mrs. C. E. Strong of West Allis and Rex Eberdt of Warrens were appointed to make the selection.

The following is the plan.

Plan for Horticultural Society Honoring Horticulturists for Outstanding Work

An engraved certificate shall be presented at the annual meeting and convention of the Horticultural Society to Horticulturists who have been chosen for the honor by a special nominating committee and the Executive Committee of the Society.

Nominating Committee

The Nominating Committee shall consist of the President, Vice-president of the Society and three others, (who need not be members of the Society) at least one of whom shall be a woman. This committee shall be appointed by the Board of Managers and shall serve for one year. The Secretary of the Society shall be ex-officio Secretary of the committee.

The committee shall receive nominations from any resident of Wisconsin. Such nominations shall be in writing and shall consist of a biographical statement setting forth the horticultural accomplishments of the nominee. Such nominee need not be a member of the Horticultural Society. The committee shall act upon such nominations and shall choose not to exceed three persons to receive the honorary recognition.

Such nominations shall be presented for the approval of the Executive Committee of the Society at the annual summer meeting. The persons chosen shall be notified of the action of the Executive Committee and nominating committee and shall be asked to appear at the annual convention of the Horticultural Society to receive the honorary certificate. This certificate shall be prepared under the direction of the Board of Managers of the Society and shall be signed by the President and Secretary of the Society.

A photograph and a statement of the accomplishments of the person thus chosen for honorary recognition shall be published in the official magazine of the Society and a copy of same shall be kept in the vault of the Society.

The above plan was adopted by unanimous vote of the Executive Committee at the regular summer meeting held July 12, 1929.

THE STATE FAIR

WISCONSIN'S greatest fair, the State Fair, will be held this year from August 26th to August 31st. This wonderful exhibition should be attended regularly by every person in Wisconsin.

Horticulturalists especially will find many things of interest at the fair. The Horticultural Building is one of the most beautiful on the grounds and contains a great many wonderful exhibits of fruits, flowers and vegetables.

It is unfortunate that it will be impossible to have the building enlarged for this year's fair as was hoped. Sufficient money for an addition to the present building of 64 feet at the rear end was included in the regular fair budget this year but has not yet been passed by the Legislature. Even if it should be passed within the next few weeks it would be impossible to get the building completed before the fair. We have every hope that this necessary addition will be ready for next year's fair and will then accommodate the exhibits which have been overflowing the present building and have been housed in a tent in the rear for several years past.

Superintendent Rasmussen, who has charge of the Horticultural Building states that the exhibits will be larger than ever this year and that he has a number of requests for commercial space in the building which cannot be granted due to the lack of room.

NOTES BY THE EDITOR

It won't be long now and city folks will be all rested up from their vacation trips.

Tourists may come and tourists may go, but billboards go on forever.

Looks as if the fruit crop will be a little smaller than last year, with correspondingly higher prices.

COMING EVENTS

Wisconsin State Fair—Aug. 26–31
Annual Convention Wisconsin State Horticultural Society and Wisconsin Garden Club Federation, Oshkosh, November
Wisconsin State Cranberry Growers Meeting, Nekoosa, August 13
National Gladiolus Show, Springfield, Illinois, August 14–15
State Potato Growers Annual Tour, August 5–12
Sum-Mer-Del Flower Show, Delafield, August 9
Lake Geneva Flower Show, August 16–17
Madison Garden Club Flower Show, Capitol Rotunda, August 17–18
Wisconsin Rapids Garden Club Flower Show, August 24–25
Milwaukee Horticultural Society Flower Show, September

W. W. McNeel, assistant State 4-H Club leader, makes this statement in a new bulletin entitled "Have Boys and Trees Grow Up Together".

"Our original forest resources would have built a board walk a mile wide to the moon. We have spent over half of this forest bank account without making provisions for the needs of future generations."

The bulletin tells of the work of the Junior Forest Rangers. Your boy may be interested. Write the College of Agriculture for the bulletin.

The Standard Oil Company has been doing a lot of experimental work with oil sprays. They found a refined petroleum white oil emulsion to be effective for late codling moth control and very good for oyster shell and scurfy scale when applied at the time of the early summer hatch. European Elm scale was controlled by an application in June.

Oil has been reported by some experiment stations as the safest spray for conifers. Very good results are obtained on red spider.

The oil sprays are reported to kill eggs, larvae and adults by contact, opening possibilities for new types of spraying.

We are a great people. We make a fuss about billboards along our scenic highways and then litter up the beauty spots where there are none with picnic refuse.

Oil sprays are creating a good deal of interest. Prof. A. A. Granovsky, who is doing experimental work at Sturgeon Bay, has promised an article on his results with an oil emulsion which gave good success.

Japanese iris are gaining in favor. Where they are hardy they fill an important place, since they bloom in July when there is a scarcity of good perennials. They are also very beautiful. We will appreciate hearing from members who have had success with them. Are they hardy the first winter if planted in the fall?

A delegation of 95 representatives of the Garden Club of America spent a fortnight in England in June under the auspices of the English speaking Union. They saw many beautiful estates and gardens as well as some still unspoilt parts of the English countryside.

The English Speaking Union is an ardent promotor of better feeling between English speaking nations.

Perhaps International good will can be built upon a mutual love and appreciation of flowers and gardens.

THANK YOU

Dear Sir: We have your letter of the 12th calling attention to the expiration of our membership in the State Horticultural Society and we are glad to enclose our check for $1.50 to cover the dues for the next two years.

We are well pleased with what we have seen of the work you are doing and with the magazine and we want to continue our connection with the Society.

Yours very truly,

L. L. OLDS SEED COMPANY.

About the Home and Garden

MRS. C. E. STRONG, Editor, 877–79th Ave., West Allis

God might have made the earth bring forth
Enough for great and small,
The oak tree and the cedar tree,
Without a flower at all.
We might have had enough, enough
For every want of ours,
For luxury, medicine, and toil,
And yet have had no flowers.

Then wherefore, wherefore were they made,
All dyed with rainbow light,
All fashioned with supremest grace,
Upspringing day and night—
Springing in valleys green and low,
And on the mountains high,
And in the silent wilderness
Where no man passes by?

Our outward life requires them not—
Then wherefore had they birth?
To minister delight to man, to
Beautify the earth;
To comfort man, to whisper hope,
When'er his faith is dim,
For who so careth for the flowers,
Will care much more for him!

—MARY HOWITT.

THE CONVENTION

State Fruit Growers Convention, Inspection of Canning Factories, Discussion of Cultural Methods, Spraying, Pruning, Thinning, etc., Short Programs in the Orchards.

HOW many of the members read this in Horticulture and decided they were not interested?

Did you know the fields were pink and white with the sweet smelling Clover, that as you drive along the shore the Daisy fields would be in full bloom. After you leave Green Bay it is a veritable flower garden—that is—if you did as our driver did, drove slow enough so one could see the flowers beneath the trees and shrubs that lined the sides of the road. Masses of blue Campanula, orange Asclepias, stately Fire weed and Rose Loosestrife, native Lilies, frosty golden Hyperciums, Thimble berries with their large white blossoms, resembling wild Roses, plenty of real wild Roses to sweeten the air, already laden with the sweetness of Clover and creamy white blossoms of the Jersey Tea. There were ripe Huckleberries, and dwarf June berries to eat. Of course we got out and admired the flowers and ate berries.

The trees—evergreen trees, Spruce, Pine, Juniper, Cedar, tiny trees only a foot high, stately trees, towering spires; no landscape architect could have planted more graceful groups. Mere words can not express their beauty, you looked at them, loved them, fiercely hoping no one would EVER CUT THEM DOWN.

And the rocks—if those folks up there ever get the rock garden fever — they will have SOME gardens. Aren't they the favored folks—trees, plants and rocks, right at their doors, all theirs, just for the labor of taking.

Almost before we knew we were at Sturgeon Bay. We registered on Friday morning at the Court house, where the crowd got together and started inspecting canning factories. Canning factories as spick and span as your own kitchen, with fascinating machinery that seemed almost human as it went through the motions of washing, cooling, pitting and canning cherries. We were not surprised that cherries "kept" in the cooling rooms—just a few seconds was enough to convince us, but we were intensely interested in the tidings of the near future, when fruits will be sent us frozen instead of canned in the usual way, their flavor unimpaired.

Time for lunch.

Lunch was eaten in a cool windswept dining room on the bay, a chance to rest and visit, then away we went through miles of ripe and ripening cherries, and somehow the leader always stopped for the programs at the orchards where cherries were ripe, tempting, delicious to gather and eat as we wandered up and down the green shady rows of trees, nothing prosy about that.

Friday evening we were guests of the Door County Chamber of Commerce at a dinner served at the Country Club. That Fish dinner left nothing to be desired, even the after dinner speakers were the sort you applaud because you enjoyed what they said—instead of the sort you applaud because they at last stop.

Saturday there were more orchards, more cherries, more delightful visits with friends we see all too rarely, interesting things to know that are being done to keep the orchards in a healthy condition.

We also had the pleasure of seeing how the cherry pickers were cared for at the Bingham Camp. Mrs. Bingham cheerful and competent "bosses the camp as she does her husband, and we enjoy it," so said the husband. Everybody and everything looked well cared for and happy, so we think he told the truth.

A fruit growers' Convention is far from being a dull affair when such men as Messrs. Ulsperger, Lawrence, Goff, Bingham, County Agent Rusy, Birmingham, Reynolds, and others were always on the job—seeing that no one was left behind and out of the good times, that a guide went with the visiting cars to explain the points of in-

terest and make sure no one would fail to return to the starting point, as there were some detours.

Incidentally we found time for a committee meeting and settled the time and place of the winter meeting. Oshkosh, that's a real good start, all we need now is the cooperation of every interested member, to make this the biggest and best meeting we have ever had.

All Garden club members should plan on being present, or at least send strong delegations. We need to plan for the next Flower Show.

We need to plan on getting the most good out of this organization. Let me tell you a secret, you Garden Club members —the President, Vice-President and Secretary are nearly bursting with pride over the success of the Flower Show. "That Flower Show was the finest thing ever pulled off under the auspices of the Society, I was PROUD OF THAT EXHIBIT." So said Vice President Goff, who was an every day visitor at the show.

Dear Mrs. Strong;—This is a picture of our Rock Garden, that was started about a year ago; it has given us much pleasure from early Spring until Fall. There is a continuous bloom with about 40 varieties of plants, some grown from seed, others purchased from nurseries.

There is a small pool which is supplied from the drip of ice box using artificial ice, the plants and fish seem to thrive in it, so it is evidently pure.

We started the garden with field stones, but have been replacing them with perforated limestone which we gather early in the morning, driving 40 miles before breakfast and digging them out of the banks.

We appreciate both our breakfast and the stones when we get home.

—MR. AND MRS. HAASCH,
Wauwatosa, Wis.

THE STATE FAIR

Do not forget the Amateur Flower Exhibit at the State Fair. Every flower lover who comes to the Fair will appreciate your showing some of those specially fine flowers you have grown this year.

Why not decorate a table, we like new ideas, new color combinations. Arrange a basket or vase of flowers.

Some of those prize winners at the Flower Show—why not come to the Fair and win more honors. We will welcome you.

SHRUBS NEED RIGHT CLIMATE

HURON H. SMITH
Curator, Public Museum

WHEN we begin to talk about shrubs, the first big question that we have to settle is that of the weather or the climate. In other words, will the shrub that we would like to grow be hardy in our climate? We will have to admit that our climate is rather a difficult one for a good many shrubs. Places that get colder than Wisconsin are able to grow shrubs that winter kill here.

Parts of New York that are much colder than Wisconsin grow shrubs that we do not have any success with at all and then there are the areas along the Atlantic and Pacific coasts where it often gets very cold in the winter but still they are able to grow shrubs because of the ameliorating influence of the ocean. The thing that stops us is not our very cold winter, but the fact that we have thawing and freezing alternately in the winter that dislodges the roots from their position and allows the shrubs to be winter killed.

The landscape architect or gardener has a very indefinite job to do and his work is not like that of any other artist who can see his completed work and know that it will stay the way he has fixed it. The materials that a landscape architect works with are continually changing, dying or getting too large or needing some attention most of the time.

Just one last word of caution keep an eye on the melon patch! Your neighbor's boy is no better than you were, and he's a half brother to the rabbits anyhow.

Rock Garden of E. C. Haasch, Wauwatosa.

STATE GARDEN CLUB FEDERATION NEWS

MRS. R. H. MALISCH, President; Hales Corners
MRS. C. W. VAUGHN, Vice-president; Madison
MRS. A. W. SPERBER, Sec'y–Treasurer Hales Corners

THE EAU CLAIRE GARDEN CLUB

MRS. A. L. MURRAY
President

WE HAVE a most flourishing club with a paid membership of about 80. Dues are one dollar a year which includes husband and wife. This money covers our expenses as no admission is charged to any of our exhibits. Each member receives a terra cotta colored wooden garden marker 6 inches by 8 inches with screw holes so it may be attached to tree, post or stake.

Our meetings are monthly, 6:30 suppers, held at the Y. M. C. A. with picnics out of doors in fair weather. A committee of six women is appointed each month to plan the menu, decorate the tables and do the telephoning.

Our programs are very full. Each month I appoint six members to visit gardens, not of members only, but all over town. They make minute reports of their visits. A report is given at each meeting of the hospital flower committee. This committee receives flowers at the Y. M. C. A. every Wednesday afternoon, arranges them and distributes them to the hospitals.

Occasionally we have three minute talks on some subject such as "My Favorite Perennial and Why." Members bring anything of interest to exhibit, an unusual flower, an article, a tool or a cartoon.

For the main part of our program we have a talk, illustrated lecture, or demonstration. We had an illustrated lecture on landscape gardening by Mr. Bass of Holm & Olson, St. Paul. Mr. McNary of the Eau Claire-Menomonie Nursery gave us a lecture with pictures on how to plant.

One of our florists, Mr. Demmler, gave a talk on Rock Gardens and built a charming rock garden, life-size, on the floor of the Y. M. C. A. to illustrate his points.

Former County Agent Stauss gave a talk and demonstration on the use of Fertilizers, exhibiting unfertilized and fertilized plants.

County Agent Sears talked at one meeting on garden pests and their remedies. He covered everything from rabbits to quack grass.

At one meeting we had an exhibit of garden furniture, trellises, bird baths etc., window boxes, catalogs, seeds, bulbs, plants, tools and what not.

Our next meeting is to be a picnic supper at Lake Hallie, with the illustrated lecture.

We have had a plant shower for those who care for a section of one of our city parks gratis. We gave them several bushel baskets of perennials.

We held a flower show June 21-22. We had shadow boxes, miniature and everything the State show had on a much smaller scale. We used a vacant store building. We received honorable mention on our shadow boxes at the State Garden and Flower Show.

Now, are we not alive?

The Eau Claire Club is indeed a working Club. We would appreciate receiving letters like this from other clubs—Editor.

SUPERIOR CLUB ANNUAL FLOWER SHOW IN AUGUST

THE Fourth Annual Flower Show of The Garden Club of Superior will be held August 7th and 8th in the display room of the Peck-Foster Motor Co.

The club sponsored a Yard and Garden Contest, which was closed last week. Judges visited the gardens which had previously been selected by a committee from the Club as being worthy to enter the contest and prizes were awarded to the two best gardens over three years old and to the two best under three years old.

On June 25th, Auxiliary No. 2 of the Garden Club, held an iris exhibit, as well as other flowers in bloom at that time. It was a very splendid and interesting show, bringing out a surprising number of exhibitors and some wonderful exhibits.

—ISURA C. JUNEAU,
Secretary.

SUM - MER - DEL GARDEN CLUB TO HOLD FLOWER SHOW AUGUST 9TH

MRS. M. M. DAY

A PLEASANT meeting of the Sum-mer-del Garden club was held in July, when a number of gardens were visited and studied.

The members met first in the lovely garden of Mrs. G. B. Nixon, of Hartland. Then followed the inspection of some other interesting Hartland gardens, including those of Mrs. Wm. Hornberg, Mrs. Ben Schneider, Mrs. E. F. Chapman,

Mrs. H. E. Salsich, Mrs. W. H. Parker and Mr. O. H. Wills. Mrs. W. R. Roberts' impressive garden on Oconomowoc Lake was next on the itinerary, after which the attractive and picturesque gardens of Mrs. A. W. Rogers were admired.

A visit to the home of Mrs. M. M. Day finished the day's inspection, and the members went to the residence of Mrs. W. H. Hassenplug for the business meeting. Miss Helen Moore concluded her inspiring lessons on wild flowers and distributed some more pictures with a helpful discussion of each one. She also gave out little books on Wisconsin wild flowers which will be very useful for reference.

Mrs. W. F. Whitman aroused a great deal of enthusiasm with the report of the activities of her committee on the Flower Show. This promises to be a large and exceptionally fine exhibition, and all interested are urged to remember the time, August 9th, and the place, St. John's Military Academy, Delafield, and are asked to watch the papers for further announcements.

At the conclusion of the meeting delightful refreshments were served by the hostess.

SUM-MER-DEL GARDEN CLUB INTERESTED IN SHOW

MRS. M. M. DAY

THE interest of the Sum-Mer-Del Garden club centers now in the approaching Garden and Flower Show and the last meeting was planned with that in mind. Before the meeting, however, the members made a journey to the home of Mrs. John Moss on Pewaukee Lake to inspect her interesting rock garden. They then went to the home of the Rev. P. H. Hartwig of Hartland.

After the routine business and the calendar for the month of August, the program was turned over to the General Chairman of the Garden Show, Mrs. W. F. Whitman, who with her committee heads led a discussion of all matters necessary to make the show a great success; and every member was notified of her own responsibility toward the show.

At the close of the meeting, delightful refreshments were served in the garden by Mrs. Hartwig.

PLANTS FOR A ROCK GARDEN

MRS. O. J. REUSS
MISS DIKKA ROSTAD
Milwaukee Horticultural Society

THE "Little Garden" committee of the Milwaukee Horticultural Society had planned to build a small rock garden with alpine plants but upon arrival found that only flag stones were supplied, therefore, had to abandon our plan for the "rookery" and built a miniature wall instead, using the following plants:

Achillea ageratifolio
Alsine laricifolio
Anthemis montana
Arenria balearica montana
Armeria maritima
Aquilegia chrysantha alba
Artemesia frigida
Bellis perennis
Centaurea ragusina
Cerastium tomentosum
Cogeswella montana
Dianthus gracialis deltoides
  brilliant
Geranium grandiflorum
Lippia repens
Pentstemon glabra
Sagina sublata
Saponaria ocymoides
Sedum stahli
  villosum
  kamschaticum
  sexangulare
  album
  sieboldi
  spectabile varietgated
  spurium coccineum
  acre
Sempervivum brownii
Nepeta mussini
Thymus languinosus
  rotundifolia
  serphylum alba
Veronica rupestris

Below the wall we had the following:

Primula pulverulanta
  veris
Sisyrinchium angustifolium
Heuchera sanguinea
  grandiflora
  lucifer
  white

Near the little pool the following:

Mysotis alpestris and palustris
Camassia esculenta
  leichtlinii
Iris hyacinthiana
  longipetala
Viola fiorariensis
  Jersey gem
  lutea
  tricolor
  Bowles niger

As rock bulbs we used:

Tulipa persica
Ornithogalum arabicum

In the pool we had Calla palustrus.

We hope our attempt will prove helpful to some flower lover wanting a wee bit of rockery in some corner of the yard.

PIERCE COUNTY SOCIETY HAS FLOWER SHOW

MRS. ALVIN HURTGEN
Spring Valley

THE Pierce County Society held a flower show in the Village Hall in Spring Valley on June 15th and 16th. There was a very nice exhibit of iris and a fair exhibit of early peonies, flowering shrubs, perennials, etc.

We divided the entries into the following classes: 1. Largest collection of wild flowers; 2. the most artistic display of wild flowers; 3. the largest collection from sandy soil; 4. largest collection from deep woods; 5. largest collection from meadow lands; 6. largest collection from bog lands.

Too many people do not know the names of the common wild flowers and we thought it advisable to use this means of informing the general public of the names.

Two of our judges came from the Goodhue Co., Red Wing, Minnesota, Garden Club and two from the Eau Claire Garden Club.

On June 20th one of our Society members and myself attended the peony show at Faribault, Minnesota. It was a wonderful exhibit and the parade had 79 floats and 7 bands.

The Brand peony farm made a wonderful display of peonies and French lilacs in their show room of everything that is best in that line. A new white Brand peony was exhibited that will be a very strong competitor of La Cygne and Kelway's Glory. It is not as yet named.

At the iris show at St. Paul June 1st, Dolly Madison won first place as the most beautiful flower in the show. Three new yellows were much admired by everyone. Yellow Moon, a light yellow, Prairie Gold, a bright yellow ruffled and very large, and Jubilee were of merit. Morning Splendor and Caroline Stringer and Dream, pink, were also much admired.

NEW OFFICERS ELECTED

ON JULY 9th, the Pierce County Society held their annual meeting at the Court House in Ellsworth. The following officers were elected for the coming year:

Mrs. Alvin D. Hurtgen, President, Spring Valley
Mrs. Wm. Bittner, Vice-president, Ellsworth
Mrs. John Graslie, Sec'y-Treas., Spring Valley

It was voted to organize units in Prescott, River Falls, Maiden Rock and Ellsworth and have the president of each unit act as member of the Executive Board instead of the four appointed by the president.

There are now 28 members.

The Eau Claire Garden Club was invited to a picnic to be held in Kay's grove some time this month, the Spring Valley unit to make arrangements.

PROF. R. E. VAUGHAN TO TALK TO MADISON CLUBS

UNDER the auspices of the Madison Rosarians, the West Side Garden Club and the Nakoma Garden Club, Prof. R. E. Vaughan of the Pathology Department of the University of Wisconsin will lecture on plant diseases and enemies and their control.

The lecture will be given at Esther Vilas Hall in the Y. W. C. A. building August 12 at 8 P. M.

Prof. Vaughan is a well known authority on plant diseases and his lecture will be of much interest to all gardeners.

This lecture is open to the public. We hope many will take advantage of the opportunity to hear Prof. Vaughan.

MEETING OF THE MADISON ROSARIANS

MRS. J. A. REED

ON THE evening of July 1st, the Madison Rosarians journeyed for their regular monthly meeting to the cottage of Mr. and Mrs. H. R. Briggs at West Point on the shore of Lake Mendota.

The weather was ideal and the setting beautiful and historic, for here at West Point was located the Indian trading post of Michel St Cyr, a French Canadian, and his Winnebago wife. St Cyr purchased the post of Wallace Rowan, an Indian Trader, in 1833, Rowan having established himself there a year previously.

This post was kept open for trade with the Indians and the entertainment of travelers until after the establishment of the city of Madison in 1837.

Just in front of and a little to one side of the cottage stands a large stone to which is fastened a bronze plate in memory of Michel St Cyr and his venture.

After inspecting the surroundings and the lovely garden with its beautiful trees, lovely rhodendrons and roses of which the Briggs' have so many beautiful varieties, the crowd gathered within the large screened veranda for a picnic supper furnished by the committee. After supper Mr. Briggs spoke on the subject "My Experience With Roses and the Types I have Succeeded Best With and Why".

When purchasing stock he advises purchasing at least three roots of a kind. For hardy types he advises Sir Thomas Lipton, Nova Zembla and The New Century.

His garden contains a beautiful specimen of the single tea rose Irish Isabella and a bush of the hybrid perpetual York and Lancaster. The latter has a history. During the war of the roses one side had the white rose as their emblem, the other side the red rose. When the present York and Lancaster rose came out, of striped red and white, the warring factions decided the Lord wanted them to end the war, which they did.

Dame Edith Helen is a favorite pink rose in Mr. Briggs' garden. It has a good long stem and stiff neck, so stands well. Etoile De Holland is a favorite red as is Los Angeles for yellow.

He warned against ordering stock from unreliable firms. A good firm will tell the weak as well as the strong points of a variety.

He advocates a slightly shaded location for red roses if one wants to keep the color intact as the sun fades strong shades.

Mr. Briggs is Vice-president of the Madison Rosarians.

ELKHORN GARDEN CLUB HAS ANNUAL SHOW

ON JUNE 21st, the Elkhorn Garden Club held the most successful flower show they have ever held.

One of the main features of the show was an exhibit of peonies shown by Mr. and Mrs. Will Tubbs.

Two beautiful luncheon tables were arranged by Mrs. Tom Morrissy and Mrs. C. Lee Shaw. Premiums were given on peonies, roses, iris, delphiniums, columbine, umbulatum, lilies, shasta daisies, pyrethrum, sweet Williams, Oriental poppies, lupines, pansies, violas, canterbury bells, mixed bouquets, gailardia, bachelor buttons and digitalis.

Mrs. Anna Livingston and Gladys R. Miller of Beloit were the judges.

Miss Sarah Francis and Mrs.

Calvin Barnes arranged some very beautiful shadow boxes.

The committee consisted of Mrs. Calvin Barnes, chairman, Mrs. E. E. Cowles, Mrs. Morris Steele and Mrs. William Hansen.

Next month the club will have a garden party at the home of Mrs. Will Tubbs.

MILWAUKEE SOCIETY TO HOLD FLOWER SHOW IN SEPTEMBER

MISS MABEL THOMS

THE Milwaukee Horticultural Society usually holds a show the early part of June but this year the Garden Club Federation show at Madison June 9th took all the time and attention of the members.

A prospective flower show will be given in the Milwaukee Public Museum in September. The date has not yet been set.

VARIETIES AND TYPES OF GLADIOLUS

(Continued from page 362)

lent examples of the laciniated type, in color, pink, white, cream and yellow respectively. Of the snapdragon type the best known representative is that of Kunderd's named snapdragon in color red and yellow, very much the form of snapdragon.

In Picotel's favorites there are picotel (Kelway) in yellow, edged with pink. Pennant (Meader) in cream edged with rose dorll, Juliana (S. E. Spencer) is bright yellow edged with peach rose, Wingold (S. E. Spencer) deep yellow edged with scarlet and Zillertal. (Pfitzer) in white edged mallow purple. Varieties too little known of great beauty. The needlepoint type, the tips of the petal are rolled into a sharp point.

The orchid type truly is an offspring of the primulinus grandiflorus section yet is so distinctive in form that it can well form a separate type. The best known representatives are the orchid (Sprague) and white orchid (Bill).

Of the Dracocephalus type there are quite a few. These are distinctive for having the ground color covered with minute paralleled lines of another color. Excellent representatives are Rosemary (Balls) pale pink veined rose, lavendar, pink.

Beatrice (Bill) pale pink veined rose pink Dante (Bill) pale tan veined purple, Beauty (Gersdoff) light rose pink veined rose, red, Bronze Beauty (Gage) ochre veined bronzy red, red Golden Bronze (Gersdorff) in rich yellow, only partially veined with brown, Carnival (Brown) in clay color veined dark red, and Clown (Decorah Glad Gardens) gray white veined dark red. Some of these are hooded while others are large and open flowered; but all have veined type of coloring as found in the species Dracocephalus.

The Novelty type (that is not a good name) takes in such things as Pelletier D. Oisy (Lemoine) and Louis Hemon (Lemoine). The former is a blend of greenish yellow and other tints of shades, somewhat speckled difficult to properly describe and the latter has a large yellow throat with outer half of petals a dull rose. It might almost go in the Picotle class. Also Pcelbus (Balb) in orchid tones.

Of the miniature type but little is known at this time though several breeders are working along this line.

CLUB ROOT OF CABBAGE CAN BE PREVENTED

A SATISFACTORY control for cabbage club root has been found by investigators at the Wisconsin Experiment Station. An application of hydrated lime, at the rate of one to two tons per acre, depending upon the seriousness of the soil infestation, resulted in a full crop of cabbage, while on untreated soil the crop was almost a total loss.

Club root, or club foot, also called "fingers and toes" in England, is a very destructive disease of cabbage and related plants. It is found in most market garden and cabbage growing sections. The organism causing the disease gains entrance to the roots from the soil. It has been known for some time that the application of lime was of some benefit, but results have not been uniformly successful. The disease has been found as severe on sweet as on sour soil.

Numerous tests both in the field and in the greenhouse with applications of different amounts of ground limestone, burnt lime, air-slaked lime and gypsum did not give the desired results. When hydrated lime, commonly known as "limate" was used on portions of fields in which there was a complete loss due to the disease, a normal crop was produced.

It is not known just why hydrated lime gives this result when other forms of lime do not, but it is thought that it has fungicidal action which kills the disease in the soil.

POLYANTHUS ROSES

HARRY GUTKNECHT

THERE are two distinct types of polyanthus roses, the large flowering and the small flowering. They usually grow about 1½ feet high depending upon the variety. A nice border can be made by using these roses as they bloom from spring until autumn.

The following are considered the best varieties at the present time:

Lafayette and Kersten Poulsen—large flowered reds.

Ellouissante—small flowered red.
Elsie Poulsen—large pink.
Chatillon—small, crimson to light center.
Geo. Elger—yellow.

Should be planted about 20 inches apart in a medium heavy well enriched garden soil.

Give about same winter treatment as tea roses although they are just a bit hardier. Soil should be kept well worked and a good watering during dry spells always are appreciated by them.

Barberry Eradication

Rust Losses Reduced Since Beginning of Barberry Eradication

THE barberry eradication work was begun in 1918 when war demands created a great need for food materials. Since that time more than 17,000,000 barberry bushes have been destroyed in the thirteen central grain growing states where eradication is in progress. Of this number almost 5,000,000 bushes have been removed from Wisconsin.

Already results of the eradication campaign are becoming evident according to figures compiled by the Rust Prevention Association of Minneapolis. The average wheat loss each year during the first five years of the campaign, 1919 to 1923, was 33,000,000 bushels, while the loss during the last five years, 1924 to 1928, was only 11,500,000 bushels. This is an annual saving of $20,000,000 worth of grain each of the past five years over the average yearly loss before and during the first five years of the eradication work.

Wisconsin has shared in this rust reduction not alone in saving of the wheat crop but in saving of oats, barley, and rye, which are also seriously attacked by the stem rust disease.

Public Schools Cooperate

The public schools of Wisconsin have been enlisted in the work of eradicating the common barberry bushes from this state. During the past several years the Federal and State departments of agriculture in charge of the eradication work have been supplying the grade schools, high schools and normal schools with literature and laboratory materials for the study of the black stem rust disease and its relation to the common barberry.

Recently teachers within the thirteen states where barberries are being eradicated competed in a contest for the production of the best teaching plan for presenting this subject to pupils of the grade schools. The Rust Prevention Association of Minneapolis offered an award of ten dollars for the best plan produced within the state and an award of one hundred dollars for the best plan within the thirteen states where eradication work is being done. A Wisconsin teacher, Miss Catherine Conoboy, La Crosse, Wisconsin, who holds the position of Intermediate Grade Supervisor at the La Crosse State Teachers' College, prepared the plan adjudged best not only in the state but among all plans submitted from within all of the states of the eradication area. The Wisconsin plans were judged by a committee of three including Mr. John Callahan, State Superintendent of Public Instruction; Miss Leavelva Bradbury, Supervisor of Elementary Schools of the State Department of Public Instruction; and Dr. Ralph M. Caldwell, State Leader of Barberry Eradication in Wisconsin.

Miss Conoboy of La Crosse. Winner of National prize for best teaching plan for rust prevention.

Miss Conoboy's plan will constitute the basis of a teaching plan which will be prepared and sent to the grade schools of the states to guide teachers and pupils in their study of this important agricultural problem.

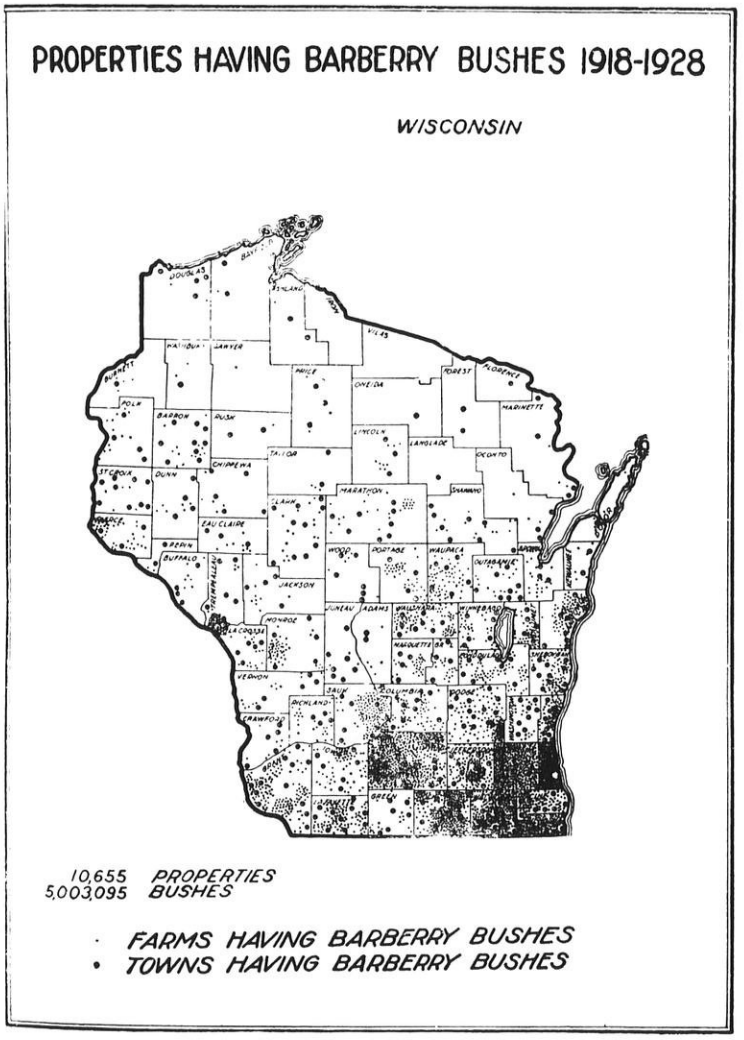
The common barberries which have been present and many of which still flourish in Wisconsin, were not introduced nor did they reach their present abundance in a day. It is now known that for almost 90 years, prior to 1918, barberries were being planted in the State and that for almost as long a time the birds have been eating the berries and

A twig and leaves of common barberry bearing the spring or cluster cup stage of black stem rust. Rust grows first on the common barberry leaves each spring and spreads from there to the nearby grasses and grain fields.

scattering the seed of this rust-spreading shrub in woodlands, waste places and along fences and streams.

It is very evident when this is clearly understood that the bushes are not to be completely eradicated by a single vigorous stroke of the State or Federal government, but that the "campaign" must be a long time, painstaking effort participated in by all of the agriculturally interested citizens as well as agents of the government.

It is with this point of view that educational work has been undertaken by those in charge of barberry eradication to supplement the direct results of the eradication work. The purpose of the educational work is to prepare the public for assisting in the campaign, not only at the present time but even twenty-five or more years from now when vigilance must still be exercised to keep the State free of this pest. The aim is that citizens interested in agricultural progress shall know common barberry, know the damage of which it is capable, and cooperate in its destruction.



BEST SOILS AND FERTILIZERS FOR GLADS

THE best soil for Gladiolus is a sandy loam slightly acid in its reaction, is the opinion of Professor Alex Laurie of the Michigan Agricultural College.

In giving a report of the Experimental work with Gladiolus at the Department of Floriculture, Michigan State College, the opinion is given that heavier soil produces better quality flowers and higher crown bulbs but decrease the number of bulblets formed. In case the soil is very acid, one ton of lime per acre applied in the fall is enough to last for two or three years but ordinarily Gladiolus can do without lime.

The soil should be manured in fall, plowed and left rough. Phosphate fertilizer has been found necessary for many soils and should be added in the spring in preference to bone meal. The latter, for best results, should be applied in the fall but it costs twice as much as phosphate and is not nearly as effective. Phosphate has the tendency to produce earlier flowering and increases reproduction.

The best method of application is to spread it in the furrow before planting, at the rate of 5 pounds to every 100 feet of row. The material should be covered before the corms are set.

A nitrate fertilizer such as ammonium sulphate may be scattered along the rows at the rate of one pound to 100 linear feet just before the flowering spikes appear. The object of this application is to secure flowers of larger size and to develop higher crowned bulbs.

If manure is used no other fertilizer has been found necessary. However, complete fertilizer may be desirable in which case 2–16–2, 3–12–3 and in some cases 4–12–4 are good. No other fertilizer should be used in connection with them.

Depth of Planting

Experiments were carried on to determine the best depth of planting. In all cases the depth of 2 inches gave the greatest number of bulblets. A 4 inch depth was the next best depth while the 6 inch depth was the poorest.

PRUNE CLIMBING ROSES AS BLOSSOMING IS ENDED

FURMAN LLOYD MULFORD
U. S. Department of Agriculture

CLIMBING roses should be pruned as soon as they are through flowering or the long sprays may be cut while in bloom for indoor decoration, without fear of injury to the plant.

This year's flowers have come on shoots that have sprung from wood of last year's growth and likewise flowers of the next year will be borne on canes that will be formed later this year.

Every possible encouragement should be given to the formation of vigorous new shoots this year. At blooming time many of these already have started as vigorous young suckers from near the base of the plant. They may be stimulated by cutting away all the wood that has borne blossoms as soon as the flowers are fading or before.

This should include not only the shoots that have borne the flowers but also the year's canes from which they sprung. With the removal of this old wood all the strength of the plant will go into producing new wood for flowering next year.

Where a fence or other low support is to be covered, encourage as many shoots as possible; over a gateway or other high support, reduce the number of canes permitted to grow to three or four.

Such strong growing varieties as American Pillar, Dr. W. Van Fleet, Silver Moon, and Christine Wright under favorable conditions will make a growth of more than 20 feet in a season when treated in this manner.

Some of the hardy climbing roses, known as pillar roses, do not make more than six or eight feet of growth in a year so that even the reduction of the number of canes will not get the growth heretofore suggested.

Occasionally a new vigorous shoot will start from near the end of an old one. When this occurs it is possible to get flowering wood farther from the root than is ordinarily the case and then it is often practicable to use the plant for covering a pergola or other high support.

Climbing tea roses and climbing hybrid perpetuals bear their flowers on wood of this year's growth that many shoot from that of last year, or older wood, or even from growth of the current season, so the pruning of these plants is simply thinning out weak shoots and surplus growth and should largely be done in the spring.

HINTS FOR PLANTING IRIS

R. MARSHALL
La Salle Gardens, Detroit

REMEMBER the ancestry of the German iris—a hot country product. Thus these iris require sun and drainage. In wet ground they rot. Many gardeners assume that the iris is a water-loving plant. They probably have in mind the native American iris, which is a beardless species entirely different in habit from the German iris and it is happiest in damp localities.

The root of the German iris is a rhizome—a main fleshy root which throws out feeding rootlets. In other sections of the iris family there are species that have bulbous roots, some that have tuberous roots like a dahlia, some that have grassy roots. The fleshy rhizome of the German iris should be planted in a raised bed or other well-drained location. Pack the earth firmly over the rootlets and barely cover the main root. The earth will wash off the main root by the time the rootlets have secured a sure anchorage and thereafter the main root will have its top exposed. It relishes a good baking in the sun. The planting should be arranged so the water drains away from it, not toward it. The iris should have at least partial sun. It will grow in shade but will be a shy bloomer. It will bloom well in partial shade—in fact, some varieties of fragile substance show up better when not in full sun. All these iris will bloom at maximum rate when given maximum sun, though, as just stated, in some cases the blooms will not stand up so well as they will when they have protection a part of the day.

Little Watering

The iris requires no watering except for a few days after planting or in periods of actual drouth. It will grow in any good garden soil. No fertilizer is ordinarily required, though a light dressing of lime (ordinary hydrated lime such as plasterers use) in the spring and similarly light application of bone meal in the fall may be used with some beneficial effect.

The German bearded iris with its companions, the dwarfs and intermediates, will give a constant show of bloom from early April till the end of June, and if planted right to start with will require a minimum of care. It is an equal garden plant for those city and suburban gardeners who are especially anxious for garden effects in spring, before they go off to lake and wood for summer residence. For the gardener who wishes to extend the period of bloom there are the Japanese iris, of a distinctly different family and requiring radically different culture, as well as charming members of other branches of the iris family that may be depended upon to pick up the banners where the German iris leave them and carry on the garden pageant far beyond middle of the summer.

FRUIT GROWERS GET SUPPLY OF SUGAR

THE steamer Cornucopia, of Norfolk, Va., chartered by the Hedger transportation company, arrived here Friday with the season's supply of sugar for the Door County Fruit Growers' Union. The union received 96,065, 100 lb. sacks of sugar. This with the carload held over from last year will be sufficient for the crop expected, it is stated. Last year approximately 22 carloads of sugar was used.

The boat was partially loaded at Yonkers, N. Y., but because of the water depth was forced to continue to Buffalo where the remainder of the load was put on. Although not loaded to full capacity, it carried 120 carloads of sugar. The average carload is 60,000 pounds. The sugar not unloaded here was taken to Chicago.

Heretofore the Fruit Growers' Union received the sugar by rail. This is perhaps the first time that a boat-load of sugar was ever docked here.—Sturgeon Bay News.

(Continued from page 357)

ists at the annual convention and a committee consisting of President C. J. Telfer, Vice-President M. B. Goff, Secretary H. J. Rahmlow and Mrs. C. E. Strong of West Allis, Dr. R. H. Roberts of Madison and Rex Eberdt of Warrens were appointed to select those on whom the honor was to be bestowed.

The Buffalo Tree Hopper

Saturday morning a good crowd of horticulturists joined the tour. The first stop was in the orchard of C. E. Irving. Here six year old cherry trees were seen. One section of the orchard appeared very much smaller than the other, though the trees were all of the same age. Prof. Granovsky stated that smaller trees had been stunted by the buffalo tree hopper. Mr. Irving said that in his opinion this was true.

The hoppers lay their eggs in slits in the bark of the tree in the fall of the year. The scars could still be seen on the smaller trees. The eggs hatch in the spring and the insect drops to the ground and feeds upon the grass. Consequently the only known method by which it can be controlled is to cultivate the orchard clean, allowing no grass to grow. This is especially necessary in the spring of the year when the insect hatches and drops to the ground to feed until maturity.

Mr. Irving stated that in the section of the orchard having the larger trees, he had practiced clean cultivation while in the stunted section the grass was allowed to grow.

Prof. Roberts called attention to the fact that clean culture maintains a better moisture supply which may have helped the growth of the larger trees.

The next stop was on the farm of B. W. Sackett. Here Prof. Palmiter spoke on apple scab control and the control of cherry leaf spot. He had a number of charts showing the relation of leaf spot and scab to rainfall and humidity. He led the group to various parts of the orchard where experiments were being conducted on the control of these two troubles. However, the season has been rather dry and consequently the check plots did not show a great deal of scab or leaf spot as might ordinarily be expected.

Girls Cherry Picking Camp

The next stop was on the orchard of D. E. Bingham where a very fine girls cherry picking camp was seen. Mrs. Bingham gave a short talk on the method of conducting the camp. Very strict supervision is given the girls who are not allowed to leave the camp without permission and may not go through the city without leaders. By maintaining strict rules the camp has a very fine reputation and mothers do not worry about their daughters' safety.

Mr. Bingham also discussed the cultivation of the orchard in relation to the mouse hazard. Clean culture is almost necessary to control the mice. He also spoke briefly on the relation of nitrogen to the color of the fruit on apples. A correct baiance must be maintained if the fruit is to have the right color. He also stated that a dust used late produces better color than spraying.

The next stop was in the orchard of M. B. Goff. Mr. Goff spoke on the thinning of apples. He stated that a tree can be thinned in fifteen to twenty minutes by two women and that the cost is well repaid. Poor apples are picked without regard to spacing.

Prof. Roberts stated that small apples never catch up to the large ones and so the picking of only small apples is a good practice. Pruning out the poor bearing wood is also a help.

Prof. Granvosky spoke at this point on the control of cherry aphis. He said that one mature aphis may give birth to as many as 125 live insects without mating and that a twig may be covered with insects in a short time. The time to control aphis is early in the season. A pre-blossom spray is essential, and should be applied just when the leaves open from the bud. At this time the case bearer also begins its work and may be controlled. Oil sprays are best.

Articles by Professors Roberts, Palmiter and Granovsky on this work will appear in this magazine in early issues so the investigations will not be described here in detail.

Following a very pleasant dinner at another resort on the lakeshore, the crowd broke up for a tour to the northern part of Door County. Door County has a great deal of beautiful scenery and the temperature is usually moderate to cool. Anyone who has not seen the orchards and beatuiful lake scenery should by all means make the trip.

Aquilegias and Snapdragons

MRS. O. J. REUSS
Wauwatosa, Wis.

AQUILEGIAS (Columbine) are a charming group of hardy perennials, members of the buttercup family. They adapt themselves for use in beds, borders, rockeries, wall gardens, grassy slopes and woodland walks. Thrive equally well in half shady and shady borders—in fact, better than in sunny positions. Plant in moderately rich light soil. If the soil is heavy, work in plenty of leaf mould and ashes. When cut, flowers lend themselves to light and graceful arrangement. The plants vary from one to three feet in height.

Different kinds:

Alpina—violet and white—12 inches—good for rockery.
Glandulosa—blue and white—12 inches.
Caerulea—pale blue and white—2 feet.
Canadensis—reddish orange and yellow—1½ to 2 feet.
Chrysantha—primrose yellow and golden yellow—2 to 3 feet. Comes from New Mexico—beautiful border plant, flowering from May to July.
Vulgaris—deep purple—2 to 2½ feet, very hardy.

This is a short spurred variety—if undisturbed for years the plants form clumps of lovely color during May and June.

The rock garden variety is short lived. Seed must be planted frequently.

For general garden decoration, long spurred hybrids are most popular. They comprise a wide range of bright and pleasing colors, blue, lavendar, pink, scarlet, yellow, white and combinations of these colors. The plants vary from 2 to 3 feet in height.

Increase by division or seeds. Divide plants preferably during September, which month is best for replanting.

Sow seeds in a cold frame in spring and early summer, or in the border outside between April and July. A good plan is to sow seeds of long spurred hybrids every year, treating them as biennials. Flowering season extends from April to July. Give plenty of water during the growing season and keep seed pods picked off. Cover with leaves in fall but take care not to smother the crowns.

Snapdragons

In sheltered gardens, snapdragons will continue to grow and flower for some years. They are so readily raised from seeds, that they are usually treated as annuals or biennials. For beds and borders, they are unsurpassed when a brilliant display of flowers is desired from the end of June until October. Plants delight in loamy soil enriched with leaf mould and decayed manure.

Seeds sown in a border or cold frame in July or August will be ready to set out next spring, or they may be planted in a greenhouse in February or March, hardened off in cold frame and planted out in April. Seeds may be planted in open garden in June or July, transplanted in autumn or early the following season.

There are three kinds of snapdragons; tall, intermediate and dwarf. The seeds of the tall kind, three feet, are sold in mixed colors or may be had in pink, buff, orange, scarlet, white, yellow, pale majenta, coral red, gold and separate shades. The intermediate grow from 1½ to 2 feet, are good for bedding and come in numerous distinct shades. The Tom Thumb or Dwarf variety, grow 6 to 9 inches, good for edging of beds and borders—are also good in walls and stony borders. The rock garden variety is about six inches, light sulphur colored, trailing, likes a warm sunny position, and blooms from May to September. Native of Italy. From Spain comes glutinosa—white suffused with lilac, six inches, trailing, blooms from May to July.

Sempervirens—trailing evergreen, has white flowers propagated from seeds or cuttings made in late summer.

Cuttings taken from snapdragons, inserted in pots of sandy mould and placed in cold frame during July or August will be ready to plant out the following March. Be sure to press roots in firmly—this is very essential. Add a little lime, snapdragons have a penchant for lime. When setting out, many advise nipping out the top to make a stockier plant.

FIND THE TULIP ROBBERS

FREQUENT reports from several sources of great beds of tulips in bloom being despoiled caused citizens and police great concern. At the Wisconsin mining school and at the State Teachers College great beds were badly torn up and the blooms destroyed. But the ultra extreme limit of patience was reached when this sabotage was carried to the graveyards.

But it takes a woman most often to catch a wily robber. Mrs. John Dennis had in her flower garden a bed of beautiful tulips. She watched her flowers. The robbers came and to satisfy herself that the identity was correct and complete she allowed them to work awhile to convince her that she was making no mistake. The robbers were red, or tree top fox squirrels, the kind that citizens pamper and allow to thrive in the trees of the city. They tore up the tulips and fed on the juicy stalks. One after another was snatched up by the hungry squirrels.

And so the mystery has been solved. Everybody feels better to know that not among our own population is there anyone so mean as to destroy a neighbor's flowers.

FIGHTING BUGS IN GREENHOUSES

Fumigate with Tobacco Products to Destroy Aphids—Cyanide for White Flies and Scale Insects

THE greenhouse owner has certain advantages over the orchardist or the general agriculturist in insect control, according to Glenn W. Herrick and Grace H. Griswold of the New York state college of agriculture. The area in the greenhouse which becomes infected is comparatively small, the plants are concentrated and can be more economically treated, and, in general, the insects can be fought in a more intensive manner.

The findings of Professor Herrick and Miss Griswold have just been issued in a Cornell University experiment station bulletin on "The Fumigation of Greenhouses to destroy Pests." The materials used to fumigate were two nicotine products and two compounds of cyanide. Fumigation with the tobacco products was found from the points of view of safety, ease of application and effectiveness preferable for the control of greenhouse aphids, except possibly during the very warm days of summer; on the other hand, whiteflies, scale insects, and some other pests are best controlled by fumigating with the cyanide compounds.

Use Nicotine at Night

Fumigation with nicotine products is best carried on at night. A rounded two and one-half inch potful (three and one-half ounces or 100 grams) of nico-fume tobacco powder is enough in an average greenhouse for 5000 cubic feet of space. The powder can be placed in piles on the walks or better on pieces of wire window screen and burned. Nico-fume liquid can be vaporized by pouring it from a machinist's oil-can on the heating pipes in a house. The pipes had best be cooled first. It is better to vaporize the liquid over an alcohol lamp. The lamp should not be set too close to the bottom of the cup of liquid. The liquid may catch fire if it boils over and if it does, water should not be thrown on it.

Cyanide is poisonous to human beings and should always be handled with care. For the ordinary greenhouse containing plants such as roses, carnations, chrysanthemums, calendulas, and ageratums, one-fourth ounce to 100 cubic feet is effective. The plants should not be watered for some hours previous to fumigation and should not be watered too quickly afterwards. The fumigations should not be started until sundown and should go on all night. Fumigation should not be done during a windy, foggy night, nor on nights when the tem perature is near zero. The temperature in the house should be from 60 to 70 degrees Fahrenheit.

POISON IVY

(Continued from page 361)

ground with a hoe or scythe and covering the infested area with heavy tar paper. The strips of heavy paper must lap at least six inches and extend for three feet beyond the edges of the patch. Two by fours, planks, fence posts or other similar weights should be placed on the paper to keep it from blowing up and to hold the paper close to the ground so no light can get to the ivy. Where the ivy is growing along fences or among shrubbery this method cannot be used, but if care is taken not to allow holes to be punched in the paper it is very effective and needs no further attention during the season.

A second method is to dig up the plants being careful to get all the underground parts. Keep close watch of the patch and dig up any new plants which start from small pieces of the root left in the soil. This method is practicable only with small areas but can often be used where smothering with paper is impossible or impracticable.

Eradication With Sprays

A third method consists in spraying the plants with chemical solutions or with oil. Effective chemical solutions are of arsenate of soda, one pound to five gallons of water; sulphate or iron, two pounds to one gallon of water; sulphuric acid, one pound to five quarts of water and Sodium Chlorate at the rate of one pound to a gallon of water. Sulphuric acid is very corrosive and will injure clothing or flesh so must be handled with great care. Iron sulphate will discolor clothing or fence posts, cement or stone walks and drives.

Kerosene or gasoline sprayed over the vines are also very effective killing agents and though more costly are more conveniently obtained and more safely handled than some of the chemical solutions. They should be applied at the rate of one gallon to the square rod where the ivy is thick. If the plants are scattered each plant should be well covered with the solution or oil as the case may be.

Three or more applications of any of the sprays will be needed during the season in order to completely destroy the ivy. Success depends upon bringing the chemical solution or oil in direct contact with all parts of the plant. To do this requires the use of a sprayer equipped with a nozzle which throws a *fine mist-like spray.* A two gallon galvanized iron knapsack sprayer can be obtained for six and one-half to seven and one-half dollars and a brass sprayer from nine and one-half to twelve dollars each. On very small patches a sprinkling can with fine holes in the cap may be used.

Persistence is the key to success. Keep at it until the plants are completely eradicated.

The Growers Market

Advertisements for this department will be accepted from members of this society who produce the articles offered for sale. Rate 2 cents per word, minimum charge 25c per issue. "Adds" of nursery stock and plants will be accepted only from those listed by the State Entomologist as having been inspected. No discounts from these prices.
Copy should reach us by the 20th of the month. Send cash with order.

WANTED—Position as gardener and landscaping. Experienced in the growing of perennials and bulbs. Can give reference. Can start October 15. L. O. James, R. 2, Box 27, Racine, Wis.

LILY BULBS
REGAL LILIES. Nice blooming bulbs $2.00 per doz. Extra large size $3.25 per doz. Post paid. H. C. Christensen, 1625 Ninth St., Oshkosh, Wis.

WATER LILIES, ORNAMENTAL Water Plants, Berry-bearing shrubs and Plants for attracting birds, etc. Write Terrell's Aquatic Farm, 1006 W. Blk., Oshkosh, Wis.

BRING YOUR FRUITS, FLOWERS AND VEGETABLES TO THE FAIR

A letter from Mr. N. A. Rassmussen of Oshkosh, superintendent of the Horticulture Building at the State Fair asks us to urge fruit, flower and vegetable growers to make and exhibit at the coming State Fair to be held August 26 to 31st.

Fruit growers should bring at least a plate or more if they are unable to bring trays. This applies especially to the central part of the state where apples will be of sufficient maturity so that they can be shown.

Also bring plums and pears, especially the former, as we do grow some wonderful plums, although people seem to have the idea that the good plums are all shipped in. The way we can overcome this is to exhibit and advertise the fruit.

A state fair catalog may be obtained by writing to Secretary of the State Fair, State Fair Park, West Allis, or may be obtained from your County Agent's office.

Vegetable growers should make an effort to increase the size of their department. Wisconsin grows wonderful vegetables but the exhibits so far would not indicate it. The vegetable industry needs a little more pep in placing their products before the public and showing the state that they are a live bunch.

The amateur flower growers usually make a very good exhibit and no doubt will this year.

In another year we hope to have an increase to the present building, so the tent will not be necessary, which will greatly improve the appearance of this already beautiful exhibit. Nevertheless this year there will be plenty of room to take care of everyone. Help put Horticulture on the map.

LOOK FOR THE IRIS BORER NOW

A letter from Mr. Louis R. Potter of Milwaukee calls our attention to the need of taking up all old iris clumps and dividing them and at the same time looking for the iris borer which has been very prevalent this year, more so than at any time during the past seven years.

This is a good suggestion. During the latter part of August the larvae of the iris borer pupate and the moths which lay the over-wintering eggs emerge from the pupae. If the borer can be cut out at this time it will minimize infection for next year. In addition all old dried foliage should be burned late in the fall to reduce the number of over-wintering eggs. In the spring the young growths should be sprayed with calcium arsenate.

Evergreens and Decidious Trees Shrubs, Bulbs and Perennials

Fall Shipments Sept. 10th to Oct. 15th

Flowers and Ferns

Should be planted in the fall

	Each
Large Yellow Lady Slipper (Cyprep. Repens)	25c
Pink Showy Lady Slipper (Cyprep. Spect.)	25c
Early White Lily (Lilium Triphilum)	10c
Wild Red Lily (Lilium Phil.)	10c
Wild Blue Bells (Capanula Rotun	10c
Tiger Lily (Lilium tig.)	15c
Iris Versicolor-blue	10c
Japanese Iris—Sky Blue	15c
German Iris—Yellow	15c
Ostrich Fern (Onoclea Strut.) Large Clumps	15c
Maiden Hair Fern (Adiantum Pedatin)	10c
Cut Leaved Fern (Aspidium Chris.)	10c
Dagger Fern (Aspidium Achr.)	10c
Table Fern (Polyodium Vulgare)	10c

DECIDIOUS TREES

	Each
American Linden—4 ft.	25c
European Linden—1-2 ft.	50c
Sugar Maple—2-4 ft.	10c
Black Cherry—1-2 ft.	50c
Red Cherry—2-4 ft.	10c
White Ash—2-4 ft.	25c
Box Elder—2-4 ft.	10c

EVERGREEN TREES

American Arbor Vitae—12 in.	3c
American Arbor Vitae—18 in.	5c
American Arbor Vitae—24 in.	10c
Balsam Fir—12 in.	5c
Colorado Silver Fir—6 in.	10c
Colorado Blue Spruce—8 in.	50c
Colorado Blue Spruce—12 in.	$1.00
White Spruce—12 in.	10c
Black Spruce—12 in.	10c
Canadian Hemlock—12 in.	10c

The above taken up with ball of earth attached for 20 cents per tree extra.

Many other varieties. Write for complete price list which includes ornamental Shrubs. Prices net Pembine. We prefer to ship by express.

AMERICAN FORESTRY CO.

Pembine, Wis.

Peonies—Gladiolus
Perennials

Walter F. Miller
Sun Prairie, Wis.

TABLE OF CONTENTS

	Page
Cherry and Apple Growing Problems	355
Variety Tests of Strawberries	358
How the Japanese Arrange Flowers	359
Poison Ivy, What It Is and How to Destroy It	361
Gladiolus—Varieties and Types	362
Gladiolus—Diseases and Pests	363
Fruit Prospects in Wisconsin	364
Tulip Bulbs a Dutch Industry Since 1600	365
National Gladiolus Show	366
Potato Growers Tour	366
Learning by Observation	367
Editorials	368
Notes by the Editor	369
The State Fair	369
About the Home and Garden	370
Garden Club Federation News	372
Club Root of Cabbage Can Be Prevented	375
Barberry Eradication	376
Gladiolus—Best Soils and Fertilizers	377
Roses	378
Hints for Planting Iris	378
Fruit Growers Get Supply of Sugar	379
Aquilegias and Snapdragons	380
Polyanthus Roses	375
Fighting Bugs in Greenhouses	381
Door County Flower Show	371

Plan Now to Attend the Biggest and Best Convention Ever Held by the Horticultural Society in Oshkosh, November, 1929.

As Nature Gardens.

Headquarters for
Potato Sprayers and Dusters
Dust and Spray Materials

Calcium Arsenate
Bordeau Mixture
Nicotine Dust
Bordeau Dust

Orchard Harvesting Equipment

Ladders
Picking Bags
Small Baskets

F. R. GIFFORD CO.
2201 University Ave.
Madison, Wis.

HARDY PERENNIALS

New & Standard Varieties

300 Kinds

Strawflowers—All Varieties

J. F. HAUSER
Bayfield, Wisconsin

Send for Price List

25 Iris Roots mixed colors for $1.00 Prepaid. Catalog of Peonies, Iris, Gladiolus, Lily Bulbs and Perennials. Free for the asking. May I send you one?

E. B. ROSA
Route B
MONROE, WIS.

The
Swartz Nurseries
GROWERS OF
Shade, Ornamental and Evergreen Trees
Shrubs, Vines and Roses
Park, Cemetary, and Golf Ground Planting
Landscape Architects
KENOSHA, WISCONSIN
Phone 2F4

W. A. Sisson W. A. Lawson

Sisson's Peonies

Rosendale, Wisconsin

Specializing in

Peonies—Irises and Gladiolus

Let us start you in the business or send you additions to your collection

Write or head your auto this way.
Intersection Highways 23 and 26

Memorial Peony bed at
Riverside Cemetery, Oshkosh

Wisconsin Wild Flowers

If you are interested in introducing some of our beautiful Wisconsin Wild Flowers into your garden, send for my catalog which describes dainty Mertensia, the closed Gentian, Hepatica, Hardy Cacti as well as many other possible additions to your garden. Here also you will find 14 kinds of hardy ferns described as well as dozen of Hardy Perennials that are hardy in Wisconsin.

I'll gladly send the catalog free on request.

W. A. Toole
Garry-Nee-Dule
Baraboo, Wisconsin

Poltl's Bulb Farms
Dahlias and Gladiolus

Wholesale and Retail

My collection consists of hundreds of the rarest varieties in both Dahlias and Gladiolus. I have a planting of 13 acres, a most beautiful sight. It is most satisfactory to make your selection on bulbs in the field where the varieties can be seen while in bloom.

Location of my main field is on Highway 60, Pleasant Hill, Hartford, Wis. Excellent concrete Highway.

Adam F. Poltl **Hartford, Wis.**

Try Our Special Selected Sweet Scented Hybrid Lupines

One Dozen $3.90 post paid

We specialize in Perennials

Send for our new illustrated Catalog

Chequamegon Flower Gardens

V. E. Brubaker, Prop.

Washburn, Wis.

DEMOCRAT PRINTING COMPANY
MADISON, WISCONSIN