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# The Flower Grower

(Formerly THE MODERN GLADIOLUS GROWER)

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Growers of Outdoor Flowers

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# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 1

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1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

### Tulip Growing in America.

[Written expressly for *The Flower Grower*.]

BY WILLARD N. CLUTE.

THE impression is widely prevalent that only the Dutch and Belgians can successfully grow Tulip bulbs for the market. Almost as often as the bulb season comes around we are told that it is unprofitable to plant the old bulbs. The inference always is that if one would have a really fine display of flowers in the spring, he must annually secure a new stock of bulbs from across the water. It has long been assumed that there is something in the soil or climate of the Netherlands that is absolutely necessary to the production of really good bulbs, but this now appears to be only a pleasant bit of fiction designed to keep up the market for "Holland bulbs" without doing any particular injury to anybody. As a matter of fact, the Tulip is not a native of North Central Europe and is probably no better adapted to that region than it is to many another. The main condition for producing satisfactory bulbs seems to be a light and well drained loamy soil. With such a soil and proper cultivation, Tulips may be grown over a very large area in the North Temperate Zone.

Just as good or better Tulips are now grown in America as ever came out of Holland. Many years ago it was demonstrated that fine bulbs could be grown in New York State and in recent years they have been grown on a commercial scale in various other places on both coasts. Even in the dry air of the prairie regions they reach a perfection that would be hard to excel. While a light

loam is probably best suited to the plants, they are, after all, not very particular as to soil, provided it is rich

soils, while not quite so attractive in appearance will produce flowers as fine.



GLADIOLUS—MRS. WATT.

[For description see page 2.]

and well cultivated. A sandy loam tends to give bright, clean, and highly colored bulbs, but bulbs grown in other

clined to bloom the first year, but if good strong bulbs are desired such as

[Continued on page 8.]

The Tulip belongs to that great class of plants whose high tide of life is in the early spring. As soon as the ground is thawed, they begin to push up their leaves and soon after the flowers—formed almost a year in advance—appear. The seeds are quickly ripened and then all the plant parts above ground wither and disappear, often before mid-summer. Not only do the plants dispense with their aerial stems and leaves during the greater part of the year, but they actually throw off their roots, also, and all that remains of the plants is the chestnut-colored bulbs which may now be dug up, sorted, moved to new locations, or stored in a cool dry place until autumn. With the advent of cooler weather the bulbs put out new roots and must be returned to the soil. They grow more or less during the cold season if the ground is not frozen and in spring are, therefore, ready to push up as soon as the frost is out of the ground.

The growing of Tulips for market is a relatively simple matter. Stock is increased by means of the bulblets that form about the mother bulbs each season. These bulblets are planted out in good soil in autumn, being set three or four inches deep and about as far apart as is customary in planting onion sets. The larger specimens are inclined

## The Dahlia.

BY J. K. ALEXANDER.

[*Written expressly for The Flower Grower.*]

### HISTORICAL.

THE DAHLIA is a native of Mexico, where they grew wild, and in their single state. Earliest history dates back to 1657, when it was called *Acocli* by the Aztec Indians. Later the name was changed to Georgian, after Prof. Georgi of St. Petersburg, which name is still used in some of the foreign catalogues. It was again changed to Dahlia, in honor of Dr. Andrew Dahl, a Swedish Botanist.

The Dahlia was first cultivated in the Botanic Gardens, at Madrid, Spain, in 1789, and at about the same time was introduced into England by the Marchioness of Bute.

Dahlia *Variabilis*, from which most of the common or Show Dahlias have originated, was single in its wild state. The first double forms appeared in 1814 and were credited to M. Donkelaar, of the Botanical Gardens of Belgium. The Pompon form appeared about 1858, followed by the Decorative, the origin of which is not clearly defined, but probably dates back some forty or fifty years. Dahlia *Juarezi*, the first Cactus Dahlia, was discovered in Juxphaor, Mexico, in 1872, by J. T. Vanderberg, and named *Juarezi*, in honor of President Juarez of Mexico. It was sent by Vanderberg to an English florist, who exhibited it in England in 1880.

Dahlia tubers or bulbs were used as a food in Mexico, and at one time in France. It was attempted to introduce them into cultivation in all Europe as a food for either man or cattle, but the taste was found nauseous to European palates.

### STORAGE OF TUBERS.

The subject of the proper storage of Dahlia tubers or roots has been greatly agitated. What I shall say upon the subject will be in the light principally of my own experience, which, I might add, has been considerable, extending over a period of twenty-five years, and the handling literally of millions of bulbs.

In the first place allow plenty of time for the bulbs to ripen off; wait until the tops have been killed by frost or the plant has attained a natural maturity. The packing away of green roots has been responsible for a great deal of heating and consequent decay.

When digging do not allow the tubers to be exposed to the sun more than an hour or two. If digging is done in the morning do not leave them out all day in the hot sun, get them into the cellar before noon. All that is desirable is to have the outer skin dry; and even that is not absolutely necessary. I have dug Dahlias on a cloudy day and hauled them in immediately, allowing no drying whatever, and had good results when storing them.

The cellar where the roots are stored should be absolutely frost-proof, and great care should be exercised when storing away to keep them from coming in contact with the walls, as I find that in extreme weather frost will readily travel down the cellar walls.

Indeed this is also true even if packed in boxes; keep the sides of the box an inch or two from the walls. The temperature should be even and maintained at an average of about 45.

The tubers should be packed in open bins, barrels or boxes, in clumps just as they are dug, and they should not be covered with any substance or material whatever. The practice, more or less common, of packing in earth, sand, ashes, sawdust and so on, should not be followed. It is entirely unnecessary and often harmful, for the reason that a mass is formed which is always damp and impervious to air, causing mildew and decay. If possible there should be an air-space around each and every clump.

The actual packing is simplicity itself. Place each clump upside down, that is, the cut end of the stalk should point towards the ground. Pack loosely, one on top of the other to any height desired.

If the cellar contains a heater it is best to pack in boxes or barrels, lining each receptacle with heavy paper, several thicknesses, and covering with paper or burlap. This treatment will have a tendency to confine the moist air generated by the bulbs, thus preventing shriveling and drying up.

If these few rules are followed I am sure that no difficulty will be found in wintering Dahlias. It is true that certain varieties have greater tendency towards decay than others, but with reasonable care no serious trouble should be experienced.

## The Third Liberty Loan.

The third liberty loan is expected to start the middle of February or the first of March and the amount of money to be raised is more than either of the previous loans. It is expected that those who have already subscribed to the two first liberty loans will do as well by the third loan and those who have not already subscribed are expected to do so when the third loan starts. The number of men that this country has under arms is increasing and the amount of money required is very great. The word is to live economically and invest your savings in liberty bonds. Every citizen should from his savings contribute to the success of the war.

Bound Volume IV of THE MODERN GLADIOLUS GROWER will soon be ready. The four bound volumes contain, we are safe in saying, more Gladiolus information than can be found in any other one publication in the world. Anyone wanting a set should order promptly. The price remains at \$1.25 per volume, \$5.00 for the four, postage prepaid. It need not be inferred that THE FLOWER GROWER will contain any less information on the Gladiolus than THE MODERN GLADIOLUS GROWER has. The good work will continue.

## The Iris.

[*Written expressly for The Flower Grower.*]

There is a peculiar charm about the Irises that appeals irresistibly to those whose taste leads them to seek a close acquaintance with them. They fairly outrival the Orchid in the wide range of coloring, which includes yellows from light canary to deep golden; blues, from soft lavender to intense purples; reds, from pinkish mauve to claret and maroon; beautiful bronzes and pure whites, and some are marked and margined with other colors in exquisite harmony.

Irises are invaluable as cut flowers, if taken as the buds are about to open, and allowed to open indoors, the colors will be much clearer and the flowers will last a long time, for as fast as one flower fades the next bud will take its place, until all have opened.

A dry sunny location suits them best. Avoid fresh manure when planting, in fact, all manure where German Iris are planted. To mulch them with strawy manure may injure your plants. If you mulch them, and this will be beneficial the first winter, when they are planted in the summer or fall, use straw or leaves. W. E. FRYER.

## Gladiolus—Mrs. Watt.

[*Subject of illustration on front cover page.*]

Originated some years ago by Matthew Crawford at Cuyahoga Falls, Ohio. It was first known as *Crimson* until a friend of Mr. Crawford's, a Mrs. Watt, selected it as the best one in his collection and it was then named for her and has since been known by her name.

Mr. Crawford reports that the variety is perfectly healthy and has good habits of growth. It is especially sturdy and not easily blown over and there are no crooked spikes and the flowers have always found a ready sale in any market.

Gladiolus *Mrs. Watt* is a mid-season bloomer; height about 3 ft., possibly 4 ft. under high culture. It always grows erect even under adverse conditions. The spike is medium in length and the flowers medium size.

The color has been described by some as a "deep cerise," but because of its great depth and velvety sheen, it is more perfectly described as a "brilliant wine." The bloom is of practically a solid color, all one shade, although some blooms show a trace of slightly deeper markings.

The color illustration on the back page of this issue is, in our opinion, slightly different than the actual color of the variety *Mrs. Watt* and we should say that the flower had more of a velvety purple sheen than is indicated. The printers' and engravers' art fails, of course, to perfectly reproduce natural colorings.

*Mrs. Watt* is successfully grown in various parts of the United States. Its keeping qualities as a cut flower are above the average. It multiplies by division from the parent corm and freely by bulblets from small corms.

## Lily of the Valley for the North Side of the House.

BY HARMON W. MARSH.

[Written expressly for *The Flower Grower*.]

THE LITTLE LADY glories in colors and color combinations, but deep down in her heart is a kindred feeling that amounts to a passion for the dainty and fragrant. Some of her eccentricities along this line are a kind of family joke, and her tall little son shows his dimples and has a wink for The-Man-of-the-House when he catches her talking baby talk to an especially saucy pansy.

When the bungalow was built, the same question that proves a stumbling block for so many owners of new homes presented itself. The building sets

pointed leaves, while the hedge forms an effectual screen for the brick foundation.

The blossoms are a little late in this shaded position, but they continue to come for three or four weeks. For delicate fragrance they have no equal. The Little Lady generally wears a spray at her throat during blooming season, she picks hundreds of the little wands, hung with pearly bells, for her friends, and the living room is permeated with their sweetness, from bunches that have been placed on mantel and table.

The bed reached its full glory the

## Flowers.

How about flowers? Does it not seem as if these beautiful ornaments were among the non-essentials to be cast aside at this time? If the world is upset is there any place for flowers? I believe that the times of stress and sorrow that lie before us need all the cheer and uplift that flowers are so well fitted to render. The delight in beautiful flowers is the only human joy which may never be carried to harmful excess, which never degrades those who partake, however freely, of its ecstasy. Did you ever hear of anyone getting drunk on a bunch of flowers? Did you ever know of a man who could not go to work the next morning because he bought a dollar's worth of flowers the night before?

Shallow people say we must get rid of flowers now. They do not know or realize the wonderful power of these lovely messengers of comfort and cheer. They vastly underestimate the good that flowers can do in lifting the hopes of the sick and comforting those who are sad. There will be many weary and worn soldiers returning ere long from the toil and din of the battle front. Of one hundred men who go over, but two are actually killed and three badly wounded. The ninety-five that return are nerve-shattered and heart-sick. Shall we have a country bare and desolate for them to return to? It is not mere sentiment alone, but an actual fact to which physicians and nurses will amply attest that flowers are a distinct therapeutic value. By all means, then, let us not destroy these efficiency builders.—J. HORACE MCFARLAND.



Showing how Mrs. Marsh grows Lily of the Valley on the north side of the house as explained in this article.

close to the north side of the lot, and there is a strip of fifty feet of soil where the sun rarely shines and which is covered by the overhanging eaves. A narrow cement walk encloses this strip and there is a privet hedge just outside the walk.

The Little Lady was, as usual, equal to the occasion. Casting back in memory for plants that would thrive in such an unpropitious location and not overhang the walk too much, there came to her a distinct recollection of the group of big whispering pines that stood in one corner of the yard of the old homestead and how, in place of the bare ground usual under such conditions, the earth was covered from early spring until frost with a blanket of dark green.

So two long rows of Lily of the Valley pips were planted parallel with the house. An old friend was glad to furnish the roots to check the encroachments of the persistent little plants into forbidden territory. A row of violets was planted next the walk and bloomed freely for a year or two, but were finally forced out by the stronger growing plants.

Lily of the Valley seems impervious to drouth and neglect, and the narrow strip is now a dense mass of dark green

past season and, as much to prevent wasting the blooms as anything else, a few bunches were sent to a down-town florist's store. Perhaps a big wedding had something to do with the market, but be that as it may, the purse of the Little Lady grew plethoric and held just \$15.50, derived from the sale of the blooms. Where can another patch of equal size be found that will yield as much with as little trouble?

One of our correspondents offers a suggestion with reference to the planting of cormels which may prove helpful to other growers. When corms are dug late in the fall the cormels from choice varieties are planted at once in boxes of soil, labeled and placed in the cellar. Early in the spring the boxes are brought up, watered and placed in a moderately warm room. When the weather is warm enough, the boxes are taken outdoors. In this way a gain of several weeks may be made and greater development of the young corms and at the same time there is a much higher percentage of germination of the cormels.

Whatever scheme of planting is used the percentage of germination of bulblets is quite disappointing at times, many varieties being unsatisfactory.

The potato seed advertisement of Geo. S. Woodruff on another page is interesting from the fact that potato seeds are now very rare. We have been fortunate enough to secure from Mr. Woodruff an article on the origin of new varieties of potatoes which will appear in the February issue.

## The Late M. Vilmorin.

Philippe de Vilmorin, head of the world-famous wholesale seed house of Vilmorin-Andrieux & Co., of France, died June 30th. He was forty-five years of age and had succeeded his father in the able direction of the firm which has long been an institution of the greatest value to horticulture and agriculture, dating from 1774. It is in the production of the sugar beet (by Louis Vilmorin in 1816-1860) that the most spectacular result rests, but each generation has labored consistently for continued improvements in vegetables and flowers, until the very name of Vilmorin raises ideals of progress and standards of accomplishment that are quite unusual. Philippe de Vilmorin had many friends in America, and the writer of this note records the loss of an esteemed friend who was at all times ready to assist from the stores of his knowledge and experience.—L. B. in *Garden Magazine*.

## MRS. AUSTIN'S TALKS

[Written expressly for The Flower Grower.]

### SELF-DENIAL.

SITTING on the step of the back porch, Lois watched the fire in the edge of the forest. She knew the place well, for there, she, with playmates, had sought cowslips in the swampy borders and, venturing farther in, had gathered the wood violets and other flowers. The tract of about fifteen hundred acres abounded in game and she wondered where the birds and animals had gone to escape the heat. She felt a personal interest in them, especially the foxes, for "Fox and Goose" had been a favorite winter game at school and many times had they left the game to join in the real chase when one, like a flitting shadow, passed down the run pursued by the hunters' hounds. She had sometimes thought that perhaps the foxes had chosen the place for their run near the school hoping for help if overtaken.

It had become quite dark and she could see that the fire had made a little gain since the previous evening. One particularly conspicuous tree which had been smoldering a couple of days, had broken into flames, and she recognized it as the old bee tree, nearly dead. It burned like a mammoth torch and by its light she saw that many of the nearby trees had been cut away to prevent, if possible, further spreading of the fire. As the upper part toppled over a feeling of chill foreboding and desolateness swept over her and she arose and entered the kitchen.

"Don't close the door, dear." It was her mother's voice.

"Why not, mother, the smoke almost strangles me and the heat is terrible. How can we sleep, and why can't we shut it out and try to forget it just over night?"

"Yes Lois, I know it is unpleasant, but do you want to shut it out, all the smoke and heat and hard work and worry, and danger out there, where father is? Think how little discomfort we have compared with him and the others. We must not forget it for a moment." And as she turned away she murmured in an undertone: "We must be ready if the wind should rise." Lois read the fear in her mother's face. "O, mother, can it come here? Can't they put it out? How could it get here?"

"Yes, we will hope they can put it out, but we must help about it. Now go to bed and sleep so as to get up rested and ready. You will have to take care of the stock at the barn tomorrow, and I will cook and bake provision to send to the men."

The smoke was settling. There were great blue wreaths of it slowly waving up and down. No wonder they were alarmed for it was their little world that was burning. There had been showers within a few miles, but in that immediate vicinity there had been no rain since spring. The prolonged

drought with the added peril of fire made the situation serious, and faces were grave as they searched the sky for signs of rain.

Day after day of burning heat had curled in spirals the long leaves of the corn, browned the green of the pastures and stilled the murmuring brooklets. As Lois drove the thirsty cows down the dusty road to the creek, she realized, for the first time, her own responsibility. That caring for the cows was not a playtime, just a chore. It had become a work, a part of her share to do, and she saw the world and her part in it in a new light.

The next day Lois rushed into the house saying breathlessly: "What do you think, mother, Mary Smith says there is no use of being so afraid of fire; that they do not deny themselves warm meals; that her mother does not watch her fire any closer than she ever did and bakes when she wants to, and she is going to get up a big dinner and have a quilting party to have something else to think about instead of fire."

"Yes, I know about the Smiths, Lois, they cannot see the fire from their place and are so interested in their own work that they would hardly know of it if it wasn't for the smoke and heat."

That very evening the Smiths' chimney burned out and a spark falling in dead grass started a fire which was quickly whipped out, but the Smiths had realized their danger.

The next morning the sky was overcast, a few reluctant sprinkles came. At night a gentle rain which increased to a downpour, and the fire fighters came home.

How like the little fire of years ago is the great world fire of today. The boys at the front giving their lives to save their fair land from destruction and death. The ones at home putting forth every effort to help. Perhaps there are some thoughtless "Smiths" who must have a fire in their own doorway before they will arouse themselves to action, and perhaps there are some who have not yet awakened to the fact that *wheatless* and *meatless* days are not a joke, but days of *self-denial*. Days to save the lives of women and children who are actually starving. *Self-denial* days that we may conserve food for our own boys as well as sell to our Allies that there may be plenty to keep all strong, well and able to combat the enemy. It affords an opportunity for those in every home to aid, to do a part of their bit, and if there are some who are not quite willing, they cannot learn too early that it is an *edict of the Government* and wilful failure to observe it may result in punishment.

Is it so hard to substitute fish or oysters only one day in the week, and save the beef and pork?

Did good old-fashioned johnny-cake

ever taste so good as on wheatless days?

There is a butterless day, too. Try eating good wholesome bread with nothing on it. Do not spread it with expensive jams and jellies. Teach the children *self-denial* to bring good to others.

It bids fair to be a long continued struggle, do not wait until there is a service flag with one or more stars in your window. Stand by the President and heed the requests of the Government now.

MRS. A. H. AUSTIN.

### How to Pot Plants.

The following suggestions for potting plants, prepared by the United States Department of Agriculture for the use of high school teachers, will be helpful to any amateur gardener getting plants ready to bring into the house:

For potting plants the following equipment and material are needed: A workbench, suitable soil, a coarse soil sieve, a sprinkling can, a shovel, material for drainage, pots, and plants. The soil should be rich in plant food and should contain sufficient sand and organic matter to prevent any tendency for it to harden or bake upon drying. When moist, it should fall apart readily when squeezed in the hand. Equal parts of a good loam, clean sand, and well rotted manure or compost, all worked through a coarse sieve, will prove suitable for ordinary work.

The following may be considered essential of good potting: (a) The soil should be moderately moist throughout; (b) the pots should be clean and soaked in water before using; (c) the pots should be of a size suited to the plant; (d) pots 4 inches in diameter and larger should be filled one-fourth full of pieces of broken pots to provide for drainage; (e) the plants should be placed at the proper depth and in the center of the pot; (f) the soil should be filled about the roots carefully by hand and then made compact by pressure with the thumbs; (g) the plants should be watered thoroughly after potting and then placed away from direct light for a day or two until they are established. If the soil has been properly compacted about the roots, it will be possible to remove the pot by turning it upside down and giving the edge a slight jar, the soil remaining compact. As the plants grow so that their roots fill the pots they should be shifted to larger pots if they are intended for inside use. Practice in shifting may be given along with potting if there are pot-bound plants on hand.

High school teachers of Agriculture who have not received the document dealing with home floriculture may address the States Relations Service of this department.

Mrs. Austin, on this page, in her usual lucid way, gives us a lesson in self-denial and patriotism. Let it be hoped that we will all heed this lesson.

# The Flower Grower

PUBLISHED MONTHLY ON THE FIRST OF THE MONTH BY  
MADISON COOPER, CALCIUM, N.Y.

FOR BOTH AMATEUR AND PROFESSIONAL FLOWER GROWERS

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OUR MOTTO:  
*Special favors to none, and a  
square deal to all.*

Canadian and Foreign  
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Growers are invited to contribute articles or notes over their own signatures, but the Editor reserves the right to reject anything which in his judgment is not conducive to the general welfare of the business.

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Vol. V January, 1918 No. 1

## Business Announcement.

We trust that this first issue of THE FLOWER GROWER will please our readers who have become familiar with our efforts in the form known as THE MODERN GLADIOLUS GROWER. As we have before pointed out, it is not our intention to neglect in any way the Gladiolus, for which this publication was originally established. This particular flower will be covered even more fully if possible in future than it has in the past. The success which has been attained by the magazine in its small form has suggested the change in name to enable us to enlarge our field, and as THE FLOWER GROWER, it is our hope to duplicate in a wider field of usefulness, the success which has followed our efforts in conducting THE MODERN GLADIOLUS GROWER.

Useful articles containing practical facts and information are what we are after and they will be utilized wherever they can be found. Long articles which have been written especially for us will be so marked. Articles secured from outside sources will be given full credit, not only to the paper where the article appeared, but to the individual who is worthy of credit for the original work on same, whenever this information is available.

Likewise we will be glad to have editors use matter from the columns of THE FLOWER GROWER providing proper credit is given as per instructions at the head of this column.

It is our aim to print facts and information of a permanent character rather than news items and matter of a transient or temporary character, although necessarily we will print reports of flower shows, etc.

Flower growers the world over may consider the columns of THE FLOWER GROWER as open to them in which to express helpful ideas, opinions and suggestions. It is only by the co-operation of growers that we will be able to continue the success already achieved.

MADISON COOPER.

## Flowers and Efficiency.

On page 3 we are reporting what J. Horace McFarland has to say on flowers in war time. He calls them "efficiency builders" and he has struck the nail on the head by making this statement. The man with the flower garden is a more efficient man than the man without one, everything else being equal. If there is any doubt about this, just pick out

two men with as nearly equal ability as possible from among your acquaintances, one of them with a garden and one who does not go in for gardening. There is no doubt about the result of your investigation.

Toilers who labor at a chosen and definite task day after day are greatly refreshed and relieved by the relaxation afforded by work in a flower garden. Flowers in themselves are cheering and educational. The colorings of flowers have a positive effect on every mind no matter how hardened or impervious. Therefore, we say to flower growers do not give up your favorite pursuit, but retain it as a matter of personal efficiency.

Further than this, and, as Mr. McFarland points out in the article referred to, flowers have a positive therapeutic value not only in connection with the sick room, but as a prophylactic or preventative of disease, not simply because of the exercise afforded but for the diversion of mind and development of faculties which otherwise might lay dormant and be unexercised.

While we say this is an age of the specialist, yet where is the specialist who has made a success of his work who does not have some avocation or hobby to use as a relaxation from his chosen field? The specialist who confines himself solely to his specialty would be a poor specialist indeed.

Grow flowers and more flowers. Make a war garden and grow vegetables, but do not neglect the flowers. Increase your efficiency and make a bigger garden with many vegetables in it, but do not forget the flowers. Flowers are useful in many different ways and a world without flowers would be barren indeed.

MADISON COOPER.

## Parcel Post and Express.

We have had such disagreeable and unsatisfactory results from express transportation during recent months that we are impelled to say a word about it as compared with Parcel Post. We note that some publishers and others are finding considerable fault with the Post Office Department because there are delays, but we wonder what these same people would have to say about the express service. Owing to freight congestion much material is being sent by express that would ordinarily go by freight and this in turn overworks the express lines and causes delay and confusion. Although there is some delay at times by Parcel Post, it is nothing compared with delays by express. We are, in fact, inclined to praise the Post Office Department for the excellent work it is doing under difficult conditions.

We beg to explain in connection with the advertisement of Homer F. Chase on our back cover page and the illustration of the variety, *Mrs. Watt*, on our front cover page: The fact that we are using *Mrs. Watt* as a front cover illustration does not mean that it is in any way an advertisement and we want it distinctly understood that no part of our reading pages is purchasable for advertising purposes. We are illustrating *Mrs. Watt* only incidentally and because we have a good photograph of it, and because we personally know that the variety is worthy of the prominence given it.

To prepare our readers for the shock of an unusual combination of subjects we might say here that we will suggest editorially next month that flower growers raise pigs as well as posies. The title of the article is "Patriotism, Pigs and Posies." Just think it over in the meantime and you will be better prepared for the suggestion.

## THE PEONY

A FLOWER FOR FARMERS TO CULTIVATE.

AFTER having worked for several years in my father's Peony garden, and learned a great deal about the cultivation of this flower, I have often wondered why it is not grown more widely, both by farmers and the owners of small gardens. Certainly there is no flower that requires so little care and gives so much pleasure in return. Perhaps, however, the gardeners and farmers of today do not know the wonderful development which this flower has undergone in the last three-quarters of a century. There was a time when if anyone spoke of the Peony, everybody thought of the old-fashioned flower of our grandmother's day—a bright crimson or white blossom that is through blooming before some of the finer modern varieties of the Peony have begun to unfold. But now what a wealth of beauty and color the thousand or more present varieties of the Peony afford us! Some of these are as delicately tinted as roses and possess fragrance, too; others are of more brilliant shades, and arrest attention by their very novelty of color. Best of all, the Peony season can now be made to last through a whole month, for there are many early and many late varieties.

It is really remarkable when one thinks of the wonderful improvement in the flower itself that the newer varieties of the Peony should be as easy to grow as the old-fashioned bright red flower of your grandmother's day, which always came up and bloomed, no matter how cold the winter. A little care at the time of planting, a little more tending-to for a year or two afterward, and your Peony is almost sure to last a lifetime and prove a more beautiful hardy flower in your yard with every passing year. For its permanence and beauty together it would seem the ideal flower for the busy farmer's front yard. It is almost the only flower that will solve the problem in his mind of getting a hardy flower that will grow vigorously and take care of itself after being once planted.

The planting of the Peony is a comparatively simple matter if certain things are kept in mind. In the first place, it should be planted in a large hole, at least 20 inches deep, and from two feet to three feet in diameter according to the size of the root. This is necessary on account of the rapid rate at which the plant grows; its tubers dig deep in the earth in their search for nourishment, and the Peony is on the whole a very "gross feeder." The more the soil is loosened and the richer the ground is in the neighborhood of the root, the easier and better will the plant grow. Once the hole is dug, however, it is well to replace the gravel or yellow dirt which was taken out of the bottom with good earth or with some old manure mixed with leaf mold. I remember a favorite

substitute of my father's, if he did not happen to have either of the latter things handy, was to put a couple of pieces of sod turned upside down in the bottom of the hole. When the sod had rotted, it formed rich earth for the roots to luxuriate in. The Peony root itself, however, should be planted in as rich ground as can be obtained to put on top of the sod or manure at the bottom. It should be set at a very shallow depth, the buds on the main stem being not less than one and not more than three inches below the surface of the ground. If the buds are set deeper than this, the planter is certainly taking a big risk on his Peony not doing well from the very start. In planting the root the ground should also be well firmed around the roots, just as in planting a fruit tree.

So much for the actual planting of the Peony; now for the best time to plant and the care the root needs afterward. Although it is possible to set out Peonies in the spring, it is not at all practicable, since it disturbs the plant just before the blooming season. Any time in the fall from about the middle of September till the end of October is considered a good planting time. This interval is also the busiest period of the whole year for the wholesale grower of Peonies. In planting a Peony root as early as the middle of August there is a great danger that the buds have not matured for the following year, or "ripened" as the nurseryman calls it, and in setting out the root as late as the latter part of November one runs the risk of not giving the root time enough to get well started in the ground before the winter frosts.

After the root is at last carefully planted, one does not have to worry about one's Peony till the beginning of the really cold, icy weather. Then during the first winter it is generally wise to protect the root with a small handful of old leaves spread over the top of the plant. In order to keep the wind from blowing these away a small amount of earth can be scattered over them. But one should remember that with the return of warm weather in the spring this covering should be removed, and that during the second winter no covering is necessary at all.

Just a few weeks before the Peony blooms is the time when it needs nourishment most, and if one has the time and energy, one might work some fertilizer, such as wood ashes or well-rotted manure, in the ground around the roots of the plant. This is a method by which an experienced Peony grower makes the most bashful plants produce the most beautiful flowers. In working the fertilizer in the ground, however, it must be spaded in very lightly, for even the small, fine, thread-like roots which lie nearest the surface must not be disturbed in any way. When the young plant's hunger for nourishment has thus been properly

satisfied, it is almost certain to show its gratitude by more beautiful flowers when the time comes.

"And is this all that the farmer has to do to have beautiful Peonies in his front lawn?" somebody asks. Yes, this is practically everything, and the strange part is that with a hardy flower so exquisite in its new shades and so easy to grow more farmers with beautiful homes have not found this out earlier. But the nurserymen tell us—and this is encouraging—that the Peony is today coming into its own as a popular flower for the humble, as well as the wealthy man's garden.—PAUL V. D. HOYSRADT in *Rural New Yorker*.

### Peony Growing.

I am glad to give my experience in Peony growing, which has covered many years. Possibly my fellow readers may obtain some profitable hints therefrom.

My method of culture, which has given most excellent results is as follows: I never plant stock that I wish to use, later than the end of August or early in September. Cut the roots to about 5 in. or 6 in., so that each one has one to three eyes. Give them a good, strong soil, enriched with old manure. Cow manure is best, but fresh manure should not be used. Plant them about 4 in. deep and 6 in. to 8 in. apart in the row, the rows 3 ft. apart, so that the horse cultivator can be used. However, if you wish to cultivate the plants by hand, or use the hand cultivator, 1½ ft. to 2 ft. apart for the rows is sufficient.

After leveling I give them a good top dressing. Good, strong, fresh manure does well for this purpose. I have never had much success with commercial fertilizers, possibly because I did not use a good formula.

If you treat the roots in this way you will have better and stronger plants in one year than you would get from those planted late in the Fall or in the Spring and grown a year over, as the latter always are stunted and diseased, whereas those that are planted early have plenty of good, clean, healthy roots.

To my knowledge Peonies grow as well in black and clayey, as in sandy soils. For selling and forcing purposes leave on as many and as long roots as possible, as they show better with the roots on and do not dry out so much.

Some varieties as *Mme. Calot*, *Duchesse de Nemours* and *Festiva Maxima* can be had in bloom considerably earlier than other varieties. To obtain this result take two or three-year old plants and, early in the Spring, cover them with glass, about 5 ft. high from the ground; this makes a difference of four to five weeks.—C. ZEESTRATEN in *Florists' Exchange*.

If your subscription ends with this issue you should renew promptly so as to avoid missing any of the numbers as the post office regulations make it necessary that we discontinue sending promptly at the end of the period.

## WAYSIDE RAMBLINGS

### ROCHESTER WHITE AND EUROPA COMPARED.

Reports from different growers as to the success or failure of *Europa* and *Rochester White* vary little, perhaps on account of difference in soil. It seems that they are somewhat erratic on the same soil.

In the summer of 1916, *Rochester White* made a sickly growth with me, while *Europa* appeared healthy. In 1917 *Rochester White* was healthy, while *Europa* was so miserable and sickly, making such a strong contrast in appearance with sturdy *Pendleton* growing beside it, that I was ashamed to have any one see *Europa*. When it came time, however, for the budding of *Europa*, it seemed to experience a change of heart, and when the great spikes of white were fully opened there seemed little left to desire in either plant or bloom. Indeed it seemed scarcely possible that they could be the same plants that a short time before looked so disreputable.

Comparing a single floret of *Europa* with one of *Rochester White*, a close look makes *Rochester White* the better, because there is no tint of color about it. Taking a full grown spike of each, and *Europa* has the advantage of a large number of blooms open at the same time, while the little color in the throat is hardly noticed without close inspection. I'm not sure whether I would fully agree with Editor Cooper that I would grow a hundred *Europas* for the sake of one bloom, but I'd come pretty near it. It should not be understood, however, that a number of plants must be grown for each spike; every corm planted is sure of a spike—at least it's that way here.

I would not like to decide which of the two *Gladioli* is better; there is enough difference between them to made me unwilling to do without either.

C. C. MILLER.

### VARIETY DOUBLET.

One of your readers in the October issue of THE MODERN GLADIOLUS GROWER wonders how the variety *Doublet*, introduced by us, received its name, and says it is a single flowered variety. If your reader will please refer to his files of our catalogues he will find that we have not offered the variety in question in either our 1917 nor 1916 catalogs. This once beautiful double flowered variety began to come single about two years ago and, fearing it might have "sported" to a single flowered kind, we discontinued offering it. However, hoping it might again become double flowered, we grew it on in a small way for two year's longer, only to find it coming continually single. Therefore, it has been finally discarded by us the past season and is now undoubtedly lost.

A. E. KUNDERD.

### NAMING OF VARIETIES.

Friend Stalnaker's efforts to find out the origin of varieties of Glads and their names leads me to tell something of the accidental ways in which naming is often done.

To begin with: I don't claim to have originated anything and about all the varieties I have named came from Mr. Groff's remarkable collection of unnamed bulbs.

There is a well known horticulturist named Burrell and it might be supposed I named *Burrell* from him, but I didn't. About ten years ago I found among Groff's seedlings several of one sort, which I marked out whenever I found it as "Brl," which meant simply "Big Red Lemoine." So I said I would call it *Burrell* and it has gone far under that name. Another, a pale yellow, I marked No. 2 M, just as a field number. "M" might stand for Maude, a blond lady of my acquaintance—so *Maude* it is.

Another of Groff's Silver Trophy Sec. 2, which bloomed late and was very stout and of a beautiful light shade reminded me of a very sweet lady (30 years or so younger than I) who is fat and fair, so I named it for her, *Lillian*.

I can also tell about Nos. 111, 113 and 114. Several years ago, when Mr. Black and I were reaching out for all the best we could get, I bought a lot of light mixtures from Mr. Cowee and from Mrs. Austin. About the same time B. got a lot from a Mr. Huth in Ohio. Among the earliest to bloom was the one we now call *Bernice* and he called it "H-1"—the H standing for Huth. A fine yellow was called H-2 and two others H-3 and 4 respectively. Later he rubbed out the bar in "H" and the marks then stood 111, 112, 113 and 114. Wishing for a name he called No. 111 *Bernice*. He intended, later, to call No. 113 *Beulah*, but found the *Rouge Torch* was the same.

Now, where No. 113 came from, perhaps Mrs. Austin can tell but I suspect she found it among the Groffs for I know she bought from that collection early. I would like to know. I forgot to say that Mr. Huth had bought much of the stock he sold here from Mrs. Austin.

Among others I have named are *A. C. Slocum*, *Dairy Maid*, *Independence*, *Littleton*, *Orchid* (apologies to Mr. Kunderd) *Queenly*, one of the very best lights in the market, I think, and they are all Groff's. I think Mr. Tracy, like myself, has been a godfather rather than a father. GEO. S. WOODRUFF.

### CROSS OF HONOR PHLOX.

I have two distinct forms of this variety, and wish to know if other growers have ever seen this variation.

One grows four feet high, and the other about three feet. They both have the same markings, but the taller one grows less stems in a hill.

WILLIS E. FRYER.

### MAKING RECORDS WHEN DIGGING STOCK IN THE FALL.

Another labor saver I have found in the fall when digging special beds of planting stock for next season or your seedlings or named varieties, is the use of a chair. The digging of these and entering all the details of the different varieties in your planting and digging record book (of course you have one) is particularly a back breaking operation, especially if you grow in a large way as the labor runs sometimes into a whole week's job. "Armed" with your record book, your hand spade, a dishpan or two, your sieves of various meshes and your chair, you sally forth, and when you have dug a batch, freed it from the adhering earth and dumped it in the pan, just sit down—in the chair—and leisurely make your entries in book, write your labels, put the precious stock in its proper bag, tying the same, doing all these operations while at your ease with the cool breezes of the fall fanning your glowing cheeks. The labor then almost becomes a pleasure and the notes you make in your book will be sure to be fuller and in more detail and next spring when you get your stock out for replanting you will know, from the full notes of the labels, leisurely written out in detail, more what you are about and (as in the case when they are hurriedly written when you are all tired out) not knowing in the spring just where you are at.

B. F. STALNAKER.

### EARLY BLOOM FROM BULBLETS.

From a long series of our new varieties of *Gladiolus*, we planted this year at the end of April several bulblets of over one-half inch in diameter, all of which had grown up in the last week of July with six to ten flower-buds, whereas the standing of the plant was as sturdy as that of first size *Gladiolus Primulinus*.

The varieties of which we had planted these bulblets were: *Reine Victoria*, *Sunrise*, *Apricot*, *Ada*, *Albion*, *L'Unique*, *Conspicuous* and *Fire Queen*. From these the *Reine Victoria* made the biggest bulblets, though the fact remains that all normal sized bulblets were in bloom within three months, just like ordinary-sized bulbs.

By way of completing our intimation we may add that the so-called mother-bulb of *Reine Victoria* measured about four inches in diameter, when we lifted the plant, and was not yet full-grown at that time.

J. J. GRULLEMANS & SONS.

### TITANIC.

I grew this variety for the first time in 1915, when it flowered on the 16th of August. In 1916 it bloomed on the 1st of September.

It was one of ten varieties I purchased from the raiser and I thought it was, with *Helen Goldman*, the best of the bunch.

I have no record of it this year, as I was away from home when it was due to flower. I hope to have it under observation again next year. G. C.

## Tulip Growing in America.

[Continued from first page.]

pirations should be literally nipped in the bud. When Tulips are grown for display in parks and private grounds, they are often lifted from the soil as soon as they have done blooming, but this practice cannot be followed with bulbs designed for flowering the next year. They must not be disturbed until the foliage has withered. Bulbs that have reached a good flowering size commonly make from two to a dozen new bulbs each season thereafter, if allowed to complete their natural growth. Two or three of these bulbs will usually equal the original bulb in size and will give flowers as good another year. If one desires the best flowers it is necessary to lift, sort and replant the bulbs at least every other year. If left undisturbed for a longer time the crowd of small bulbs will cause the flowers to decrease in size. When dug the smaller bulbs may be removed and planted as indicated. The different varieties of Tulips differ greatly in respect to the number of small bulbs produced. Some, as has been noted, produce two or three salable bulbs as well as several smaller ones, while others produce only a single large bulb with others much smaller.

Tulips are also easily grown from seed. In such cases the seeds should be sowed as soon as ripe in light soil in a cold frame. They are said to make bulbs of considerable size the first season, but more information on this subject seems desirable. Since the bulblets produced by the mother plant are essentially all parts of the original bulb they will give flowers like the parent, though now and then a bulb sport may originate. The best chance of getting new varieties, however, is by hybridizing and the growing of new plants from the seeds produced.

Tulip bulbs are very hardy and will endure the frost and cold of winter without protection of any kind, but it is better to give them a good mulch of leaves, straw or old manure as soon as the weather becomes cold. If leaves are used as a mulch, they may be left on the beds in spring and the young shoots assisted in growing up through them. In this way weeds are kept down and the moisture held in the soil. When the bed is to be prepared for a new crop, the leaves, of course, will be turned under. If one follows the Tulips with a quick-growing vegetable crop, he may secure two crops, one of vegetables and one of flowers, from the same land.

The most attractive race of Tulips, and the one that seems to have received the most attention from growers in this country is that which includes the so-called *May-flowering* and *Darwin* Tulips. These blooms are so much superior to those of the early Tulips that they are likely to become increasingly popular. As bulb growers regard them at present, the *Darwin* Tulips vary in color from nearly white to the deepest red, maroon and lilac. They exhibit no shades of yellow, and are decidedly weak in the matter of

white flowers. There are plenty of yellows and whites in allied groups, however, and there seems to be no reason why we should not have good flowers of these colors to match the other shades of *Darwin* Tulips. One of the most fruitful sources of new varieties is found in changing plants from one locality to another. It is likely, therefore, that when American breeders bring to bear their efforts on this class of bulbs we shall have advances comparable to what has occurred in the Carnation, Rose, Sweet Pea, and other well known flowers. In the writer's grounds a number of desirable bulb sports have appeared and there are indications that others would develop if the subject were followed up carefully.

## A Beginner's Gladiolus Experience.

[Written expressly for *The Flower Grower*.]

With last season's Gladiolus garden a "delightful memory" and next season's yet a "prophetic dream," the winter evenings give ample time to the Gladiolus grower-for-pleasure to ponder the experiences of the season just past and digest their lessons. To the writer, who has been a real Gladiolus "fan" for but two seasons, experiences were numerous and valuable.

Introduced to the modern and marvelous Gladiolus but three seasons ago by receiving a few really good corms as a premium to a little floral journal, we were led to purchase a goodly quantity of a fairly good mixture and a few of the more common named varieties. Their beautiful blooms resulted in an enthusiasm almost boundless and in the resolution that Gladioli should have a very large place in the next season's garden.

Fortunately at this time we were introduced to THE MODERN GLADIOLUS GROWER, and its monthly visits greatly enjoyed. Advertisements of growers who offered stock were carefully read and selections of about twenty-five varieties were made and purchases made of advertisers patronizing this journal. We look back over the season past and cannot discover a disappointment in any one of these—all corms good and every one true to name.

But, with other seed and plant catalogs, came one from a prominent Illinois seedsman and it was a wonder. Every page bore the slogan, "Quality, Nothing but Quality!" and every seed and bulb was promised to be wonderfully "Full of Life." That catalog must have been prepared by a graduate from the school for circus poster writers. This page of Gladioli offered marvels as big as dinner plates and a number of the best known named varieties were offered at about half the retail price asked by Gladiolus growers in general. The bait was taken and we bought some of each of three kinds, *Mrs. Frank Pendleton*, *Europa* and *Sulphur King*. Such scrawny bulbs we never received from any reputable grower, but they were accepted, planted and carefully tended in the hope that

blooming time would vindicate them. Late in the season the so-called *Mrs. Pendleton* put forth some buds and when they opened, behold! They were the variety known as *Halley*. Then *Sulphur King* put forth some flower spikes and behold, *Halley* bloomed again. Then, with the hope that this seedsman was at least 33 $\frac{1}{3}$ % honest, we waited for *Europa* to bloom but when it finally did she nodded to a row of *Augusta* blooming near and hailed them as sisters, for such they really were. Not a corm in the lot true to name and every one of a variety cheap upon the market. We had paid five times their market value and didn't want them at any price.

Thus we learned that THE FLOWER GROWER will, by its advertising columns, bring one in touch with the honest grower whose reputation is made by the quality of his stock and not by bombastic advertising and high sounding slogans which are but "sounding brass." C. S.

## Preserve Poultry Manure.

There is no natural manure produced on the farm as rich as poultry manure. Average mixed horse and cattle manure carries 10 lbs. of nitrogen, 5 lbs. of phosphoric acid and 12 lbs. of potash per ton. Poultry manure contains in comparison 32 lbs. of nitrogen, 35 lbs. of phosphoric acid and 18 lbs. of potash. Where ordinary farm manure has a fertilizer value of \$1.50 per ton, poultry manure is worth \$5 per ton. Even when produced in small amounts such material is well worthy of careful preservation.

Poultry manure should be allowed to dry as quickly as possible and be kept dry. In this condition it will lose but small amounts of its valuable constituents. Like ordinary manure it ferments rapidly when moist and will lose thereby a large percentage of its nitrogen, worth on the market 25c. or 30c. a pound. Since much of its potash, phosphoric acid and nitrogen is soluble, this manure may suffer greatly from leaching. Caustic lime should never be mixed directly with poultry manure as it encourages the chemical and biological actions spoken of above which liberate nitrogen as ammonia.

Poultry manure is rich in nitrogen and low in phosphorus. These two conditions may be corrected by diluting and reinforcing it as follows: To 10 lbs. of the manure add 6 lbs. of sawdust (or some similar dry material) and 4 lbs. of acid phosphate. This gives a fertilizer carrying 8% of nitrogen, 3.6% of phosphoric acid and .45% of potash or about the same proportion of plant food elements that are found in a 3-12-2 mixture, but only one-fourth as concentrated.—*Florists' Exchange*.

The suggestion made by Mr. Clute that Tulip growing in America can be made profitable should be of interest to bulb growers. Labor conditions are serious at the present time here, but we understand that the same is true of Holland.



## THE ROSE

### Tausendschön, a Climbing Rose of Merit and Distinction.

[Written expressly for *The Flower Grower*.]

The writer has a number of varieties of climbing roses and they all made a glorious showing during the past season which was noted for being one of the best for roses in many years, but the variety *Tausendschon*, or Thousand Beauties, made the finest display of them all.

This rose gets its name from the many shades of color that the flowers undergo during the period of their bloom, and as the same cluster embraces flowers in the different stages of development, varying from deep rosy carmine through various shades of pink to flesh and white, the effect is very showy, indeed. A single truss is a bouquet in itself. The flowers are very large for a climbing rose, and are produced in profusion, even on young plants, and every year it continues to improve. It is easily the best of the multiflora roses, and as the growth is not so rampant as many varieties of this class, it can easily be kept within bounds; in fact, it makes an ideal pillar rose. It is resistant to mildew and other fungous diseases which so often attack climbing roses, and excepting only the rose chafer, the reprehensible bug that delights to infest all light colored roses in June, I have not known of its being bothered at all by insect pests.

Not by any means the least important of the many recommendations for *Tausendschon* is the fact that it is very hardy, needing no winter protection whatever, and the absence of thorns or pricklers add to the pleasure of growing it.

I think if I were limited to but one climbing rose, that variety, if the selection were left to me, would be *Tausendschon*.

H. G. READING.

### To Combat Rose Diseases.

Rose gardeners should take advantage of the fall season, say specialists of the United States Department of Agriculture, to make their plants as free as possible from disease by methods that cannot well be followed during the growing season. Whatever the disease, the affected portion of the plants should be cut out in the fall and the shortened bushes sprayed. It is assumed, however, that spraying will not have been delayed until fall, but will have been carried on as a control measure at frequent intervals since spring. The diseased wood removed in the fall, together with the old leaves and debris under bushes, should be burned. In case of attacks by rusts, canker and leaf spots, the diseased wood or leaves should be removed and burned even during the growing season.

For powdery mildew, the control sprayings for the summer spores should be with lime-sulphur or potassium sulphid. After cutting back in the fall, the plants should be sprayed with lime-sulphur or strong Bordeaux mixture. The control sprayings for rusts should be ammoniacal copper carbonate. The fall spraying should be with a strong Bordeaux mixture. For leaf-spot, leaf-blight and anthracnose, the control sprays may be either Bordeaux mixture or ammoniacal copper carbonate, and the fall spraying should be with the former.

Leaf blotch, also known as black-spot, is a very injurious disease. The first symptoms are the appearance of irregularly shaped blackish spots on the upper surface of nearly full-grown leaves. In this stage the trouble may be controlled by several sprayings with ammoniacal copper carbonate or Bordeaux mixture, but if these precautions are not taken another stage of the fungus develops in the same spots. The fungus in this later stage lives over the winter on fallen leaves and sets up a new infection in the spring which can only be prevented by raking up and burning the fallen leaves and spraying the dormant bushes with strong Bordeaux mixture.

### The Hardy Yellow Rose.

In connection with the hardy yellow Roses mentioned by A. E. Thatcher in *The Garden Magazine* for April and R. S. Sturtevant in the July issue, it may be of interest that the *Copper Austrian* was wintered successfully here, for several years, where the temperature will be as low as 40 degrees below zero every winter, at some time. It was not killed back at all until last winter, when there was severe frost and no snow until Christmas. The *Scotch Yellow* was not injured in the least. They have no protection of any kind, being on the open prairie, but ordinarily the snow covers them from four to eight feet deep. The *Wichuraiana Hybrid*, *Klondyk*, has survived our winter as has the *Soliel d'Or* ("earthed up" 12 inches or so.) The *Persian Yellow* and *Harison's* are hardy here. This year I am trying *Yellow Austrian*, single and double; *Gottfried Keller*, an Austrian Hybrid; and *Daniel Lusneur*, the only yellow *Rugosa* I have met, although *Dolly Varden* is described as apricot, and sometimes as pink. There is no lack of hardy Roses of other shades, but yellow is rare here.—A. W. MACKAY, Canada.

### Cutting Gladiolus Bloom.

The comments on this subject which appeared in the November issue together with photograph interested me considerably as I have experimented somewhat along this line in the past.

Gladiolus bloom was cut with 2, 4 and 6 leaves left to mature the bulb.

Of four different lots of *Gladiolus America* the first lot was cut with no foliage left on the plant with the exception of the two bottom leaves, the second lot with four leaves, and the third with six. On the fourth lot no flowers were cut, as no buds were allowed to form.

When the bulbs were dug, those with two leaves were very poor, in no case was the new bulb larger than the old one and in most instances the plant had died before maturing. There were very few bulblets.

Those with four leaves were very good and seemed well ripened and of



normal size, with a good yield of bulblets.

Those with six leaves perhaps averaged a little higher quality, and slightly larger but not a great deal.

The fourth lot were in no way better than the third.

This proved to my satisfaction that no less than four leaves should be left on the plant for best results. However, in most cases the flower stem should be plenty long enough, if cut to leave five or six leaves.

As the article invited comment I have taken the liberty of explaining my way of cutting as it allows two or three more inches of flower stem without taking an extra leaf.

Insert the knife with edge pointing down at "1" following down the leaf to "2," turn the edge against the flower stem and cut same not quite through.

The stem may be bent sharply towards the cut and will snap off and pull out of the leaf socket, making a neatly finished job and allowing the greatest possible length of stem.

H. E. MEADER.



[This department of THE FLOWER GROWER is intended to be one of its most helpful and valuable features. All questions asked in good faith and which are of general interest will have careful attention. The full name and address of the writer must be given, but not for publication.]—EDITOR.

### Growing Gladioli in Mixtures.

TO THE EDITOR:—

Is it advisable for the beginner to grow Gladioli as a mixture? It is very much cheaper to start in this way than with the named varieties and I would be glad to have your suggestions. I do not want to make much of an outlay to start with.

BEGINNER.

*Answer:*—We believe strongly in mixtures, but there are some mixtures on the market that are not worth anything at all as they are not worth the expense put into them in the way of planting and culture. If you buy a mixture from any reputable grower, however, you may be sure of complete satisfaction from it and some of the most advanced growers, both amateurs and professionals, have mixtures which are a source of great satisfaction and pride to them. Many people who buy named varieties and who are not very careful with their labeling, at the end of a few years only have a mixture, but just the same their enthusiasm for the Gladiolus does not wane for this reason. The Editor has been growing Gladioli in mixture from the very first and his mixture is better now than it ever was before and he takes a great deal of satisfaction in securing mixtures from different growers.

### What is an Old Gladiolus Corm?

TO THE EDITOR:—

Reference is made from time to time to "old" Gladiolus corms and the statement that they are not to be relied on for invariable blooming nor propagation. What is an old bulb? Is it to be understood that the newly formed full-sized corm forming on the old exhausted dried-out corm which has bloomed, will not be as valuable the second year as the one from which it sprung and that the one (or more) forming the third year will be of less value than the one forming the second year, etc., and are such full size reproductions not as valuable for sale as those raised from bulblets? I will be very grateful for a word to set me straight on this. It has always been represented that an investment in Gladioli was in the nature of a permanent investment because of the reproduction of these full size bulbs.

W. G. N.

*Answer:*—While some growers claim a scheme or process of rejuvenation, yet it may be accurately stated, we believe, that after a Gladiolus corm reaches its greatest development that it then begins to get "old" and its period of usefulness is limited. There

is, of course, great difference in varieties as to their vitality and longevity, but yet the statement is equally true, so far as we know, of any variety.

It is our impression that the best and most experienced growers state that the very best and largest bloom can be had from Gladiolus corms two or three years from cormels or bulblets. If a large corm results in two years' growth, it will be a very strong one and will produce fine bloom. If it takes three years to secure a large corm the bloom will hardly be as good as from a corm of the same size but two years from bulblet. After reaching its period of maximum quality the new corm forming on the old one will, we believe, become of less and less value from year to year until finally it may deteriorate into several divisions or into an old, flat corm which will not start a sprout or which will fail to bloom if it sprouts. Our own personal experience along this line is, of course, somewhat limited as compared with the older commercial growers, but we believe that the life history of a Gladiolus corm is about as outlined above.

### Gladioli with Carnations.

TO THE EDITOR:—

Much space is available from death of carnation plants and I do not care to utilize the space for carnations again this season. Will Gladioli bloom during the winter months?

B. J. M.

*Answer:*—The Colvilli varieties, *Peach Blossom*, *Blushing Bride*, etc., and some of the Nanus type should answer your purpose. These generally will not flower before April 1st. The large growing kinds like *Augusta*, *America*, etc., should not be planted until after January 1st. Gladioli in combination with carnations work out to good advantage in many cases.

### Gladioli Under Glass.

TO THE EDITOR:—

When growing such varieties as *America*, *Mrs. Francis King*, etc., under glass, please let me know how deep they should be planted for best results and do you think it is necessary to support the stalk in any way?

R. N. G.

*Answer:*—Gladiolus corms in the greenhouse should be planted 4 to 5 inches deep and the flower stalks will need no staking. Sometimes when grown out doors supporting is needed when growing exhibition bloom, but

if planted about 6 inches deep, which is correct for large corms, staking is not ordinarily necessary.

### Some Things My Neighbor Does With Flowers.

Her window garden is lovely from early fall until summer because pots are dressed in crepe paper. She cuts white or rose-colored paper into lengths, turns down a hem at top and bottom and gathers the pieces a little full around the pots. Indoors, this paper has retained its freshness and color the whole winter, the contrast with gay blooms and green foliage is very pretty.

She makes hanging baskets for Asparagus Sprengeri of candy buckets. After boring several holes in the bottom of the bucket for drainage, she paints the bucket white and plants the Asparagus in pure leaf mold. Transplanting is done only every three years. The ferns, such as *Boston Sword*, *Scotti* and *Whitmania* may be handled the same way. They are kept out of reach of touching by passers-by, as touching the fronds at the tips frequently will cause them to blight, look brown and ugly. Geraniums and begonias, meant for winter blooming, are planted in rather small pots to crowd the roots and force growth and bloom to the top.

The Christmas Cactus, while in bloom, is kept out of the direct rays of the sun, as sunshine will cause the blooms to wither much sooner than when the plant is kept in shade. She takes up one or two-year-old Roses in the fall, transplants them in large pots and her winter garden always contains a few lovely roses through winter. These, of course, must have as much sunshine as possible, and are placed in a southern and western exposure.

As spring comes on she transfers her blooming plants to the soil of garden or window-box and keeps her Ferns indoors to give a cool atmosphere to the living rooms, during the hot days.

Her hanging baskets and buckets are renewed and hung on the porch to grow in luxury all the summer long; all these things and more each of us can do.—MRS. C. H. RUST in *The Progressive Farmer*.

### Defining the Amateur.

At a meeting of the executive committee of the Am. Dahlia Soc., Nov. 8, discussion was taken as to the definition of an amateur. It was proposed by J. J. Lane and carried, that the definition of an amateur gardener, with slight modification, as adopted by the New Haven (Conn.) Horticultural Society, be the definition as agreed to by the American Dahlia Society; the same to be published in the next bulletin, with an invitation for criticisms or amendments, and the same to be incorporated in the schedule for the next annual show. The definition agreed to by the executive committee is as follows:

"By the word 'amateur' is understood a person who maintains a garden with a view to his or her own use and enjoyment and not for the purpose of making a profit or gaining a livelihood. No person can compete in the amateur classes who employs a trained gardener, or who is employed as such.

"An objection raised to the rightful qualification of an exhibitor shall be dealt with by the executive committee. All protests lodged with them shall be judged according to their merits and the committee's decision shall be final."

### Hedges.

While it is often a matter of taste as to whether a hedge should be planted or not, it is best to consider the hedge as a utilitarian feature rather than an ornamental one. In other words, do not advise a hedge unless it has a purpose other than being ornamental.

Hedges were originally planted as barriers, but their use has become largely a habit, or, like the mantels in steam-heated houses, become purely ornamental.

There is something a little selfish about a hedge. I often recall as a boy in England the vain efforts to see the beautiful gardens either through or over them, but since growing up I have also felt the need of a wall or hedge to protect the garden treasures.

If a hedge is needed either to mark a boundary for a screen or to separate one section of ground from another, select a suitable one and have it as handsome as possible. It is better to be without a hedge than have one thin at the base, gappy and uneven.

The California Privet is, perhaps, the best hedge plant in existence, in its particular territory, and for this reason it has become so common as to be tiresome, and one longs for a little more variation, yet when it is well planted wonderful results can be obtained.

The Jersey coast is famous for its Privet hedges, as the salt air and sandy soil of the seashore seem to suit it. It rarely gets winter-killed there, while a little further inland it is killed periodically even in the same latitude.

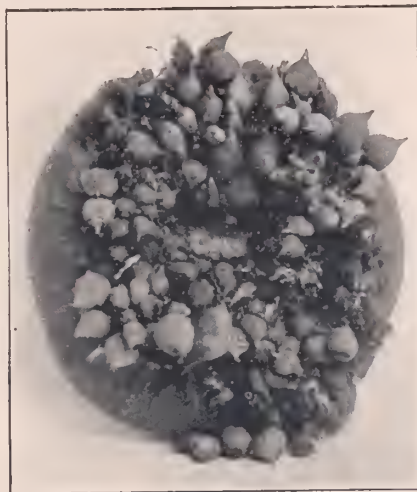
With many hedges, killing back is often a blessing in disguise, if the roots are not injured it will come up thicker than ever and a new one is formed in one season.

It is to be recommended when a Privet hedge is old, or thin at the base, that it be cut down to about six inches of the ground. This should be done in early April.

Too often when planting a new hedge, everything is sacrificed for immediate effect. The client is too anxious to get a full grown hedge right away. This is impossible. A hedge worthwhile must be grown from the bottom up.

Hedge planters usually have their own ideas as to distance between plants, double or single row, depth to which the plant should be set and cut after they are set, but whatever the opinion the hedge will be no better or more vigorous than the single plants composing it, and it will not be a success unless they all grow evenly and

vigorously. To insure this the essentials are: A deep trench with good soil, no overhanging trees, young vigorous plants that have not been dried out, sufficient room between the plants to allow each one to develop (about one to every twelve inches is about right), set the plants down to where they branch, and cut the plants off level, leaving not more than six inches above ground. If these are provided, a good thick hedge from the bottom up will be the result.—*Nat. Nurseryman.*



A single corm of the variety *Mrs. Dr. Norton* which by actual count produced 447 cormels.

Photograph sent us by the originator A. E. Kunderd, Goshen, Ind.

### Catalogues and Price Lists.

Jelle Roos, Milton, Mass. Illustrated catalogue and price list of Gladioli, 12 pages and cover. The varieties *Mary Fennell* and *Daisy Rand* are shown in color and the cover is finely illustrated in color. The catalogue lists an exceptionally fine selection of the most meritorious sorts in commerce.

A. E. Kunderd, Goshen, Ind.—48 page catalogue and cover, listing the Kunderd Gladiolus productions including the new sorts introduced during the last year or two. Finely illustrated and with many useful hints on culture, etc. The Kunderd varieties are fully described and many of them illustrated by fine halftones. This catalogue should be in the hands of every Gladiolus grower.

H. E. Meader, Dover, N. H.—Wholesale list of northern grown Gladiolus corms, about 20 named sorts and mixtures.

W. E. Kirchoff Co., Pembroke, N. Y.—Trade list of Gladioli for 1918, about 20 varieties.

Earl Edgerton, Lansing, Mich.—Retail list of a dozen choice varieties including several of the Kunderd specialties.

L. Merton Gage, Natick, Mass.—Wholesale price list of about three dozen selected standard varieties and some of the finest new sorts including *Mrs. Dr. Norton*.

E. E. Stewart, Brooklyn, Mich.—Four page wholesale price list with extra good descriptions of selected American grown and foreign varieties, including Mr. Stewart's specialties.

Austin-Coleman Company, Wayland, Ohio—Wholesale list of the Austin originations, *Evelyn Kirtland*, *Herada*, etc., with description.

Wilbur A. Christy, Warren, Ohio—Wholesale list of standard varieties and the Christy originations including the new *Prim Beauty*.

Ray P. Selover, Lakeside, R. D. No. 9, Auburn, N. Y.—Descriptive wholesale list of Gladioli, six pages. All of the best well known and standard sorts with many of the new and improved varieties, and priced in ten and one hundred quantities.

### Garden Planning in Winter.

The planning of a garden can be begun right now. January is just as good a time to make a garden in the imagination as any time we know of. Vegetables and flowers planted around the fire in January are necessarily much finer and more ideal than those we actually plant in the garden in the spring, but yet the winter gardening has its place, and advance planting is always profitable if consistently and skilfully carried out.

In the north where a blanket of snow covers the ground during the winter, when the sun begins to shine for a longer period after January 1st, our thoughts turn toward spring planting. We should confine ourselves mostly to standards and not branch out into novelties and experiments. This advice is especially pertinent during war time. Many war gardens which were made last year resulted in a great loss of labor from the fact that things were produced which could not be utilized. Profit by your last year's experience and plant standard crops which are useful anywhere and at any time. Crops which may be used for animal food if not wanted for human food are to be favored. In flowers stick to the tried and true with only a sprinkling of the newer sorts for trial.

### Prolific Corms of Peace.

One of our subscribers writes as follows:

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J. T. D.

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# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

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FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

## Age and Gladiolus Corms.

BY WILLARD N. CLUTE.

[Written expressly for *The Flower Grower*.]

THE EFFECT of age on the blooming qualities of Gladiolus corms has come up for discussion at intervals for a long time, but thus far the observations have been of a highly theoretical nature. Such speculations are of interest but they are not calculated to settle the question. What is needed is a little practical experimentation such as any Gladiolus grower can carry out. This would be of great value, since it would decide, once for all, whether it is worth while for the gardener to save his old corms, or whether it is better to buy new ones each year.

The whole subject is confused with the running out of species and varieties and needs a careful re-statement. It is well known that some forms of plant life change; otherwise there would be no possibility of making improvements in plants. The most variable parts of plants are the seeds, since the young plant, which each seed contains, is the result of the union of a sperm and an egg and these two elements may come from different plants. Seedlings, therefore, may have the qualities of two parents and vary accordingly. A line reproduced by seeds annually may easily run out, either by splitting up into new forms more or less unlike the original, or in taking on new characters.

But with plants propagated by vegetative parts the case is quite different. There is no such opportunity for varia-

tion as there is with seeds, for each division is essentially like the plant from which it came. There may, of

dinarily it is a single bud or twig which has the new features. A form propagated by tubers, bulbs, corms, runners, or divisions of the root-stock ought, therefore, to remain the same for all time. As a matter of fact, there are various forms in cultivation that have been continued by vegetative means for hundreds of years without any sign of running out.

Mere continuity of a given form, however, does not touch the heart of the Gladiolus matter which, as I understand it is: Are the older parts of a Gladiolus plant as floriferous as new divisions? If we were to make an inference from other forms of the plant world we risk making an error because plants vary greatly in this respect. We are familiar with a vast number of trees, shrubs and herbs whose flower buds are formed in autumn and in the case of the trees and shrubs, on wood made the previous summer. There are many others, however, that form their flower buds in spring after growth has commenced; on the new wood, as it is commonly called, while not a few, the currant for example, produce flowers on both the old and new wood. In our part of the world plants which form their flowers on wood more than a year old, are rare, yet the red-

bud (cercis) does it and in the tropics this phenomenon, called cauliflory, is very common. The cocoa plant is a good illustration. Our gardens, also,

[Concluded on page 23.]



GLADIOLUS—MONGOLIAN.

[For description see page 14.]

course, be sudden "sports" or "mutations" quite different in character from the original, such as that which produced the naval orange, but an entire form never makes such changes. Or-

## THE DAHLIA.

### Dahlias That Won't Bloom.

By J. K. ALEXANDER.

[Written expressly for *The Flower Grower*.]

Dahlias that do not bloom give as little satisfaction as a house without paint or coffee without sugar, and most of us know what that last means. But the remedy is not so apparent.

One sees a seemingly normal plant; that is, of the proper height, of good growth and in a good healthy condition. In fact everything appears all right, but the one lamentable fact that the thing does not bloom. At least if it does, the blossoms are poor sickly looking specimens, lop-sided and small.

Such a state of affairs has a tendency, putting it mildly, to discourage the continued efforts of the amateur Dahlia grower. He just naturally gets disgusted and decides emphatically and perhaps audibly, if he's alone, to try something easier.

Now what is the answer? Why does not an apparently healthy Dahlia plant bloom?

The reason will probably be found in one of three causes. Of course, I am taking several things for granted: that the root when planted was in good condition; that the ground was properly prepared; that weeds were kept out and cultivation attended to. These things we all know and perhaps a few practice. But outside of these elements there are three principal causes why Dahlias still refuse to bloom satisfactorily.

1st. Lack of fertilizer at the time of budding.

2nd. Planting in heavy soil with a clay sub-soil.

3rd. Insects.

Now, I am not contending that this is an exclusive list of troubles, but I do say that if my Dahlias were blooming poorly, I should look for the cause in one or more of these three factors, and I should probably find it.

1st. It takes on the average about two months to bring a Dahlia into bloom. Now, what is the more or less common practice in fertilizing? At the time of planting, a handful or so of commercial fertilizer is thrown into the hill, and this amount is supposed to supply the plant with food for three months or more. If the ground has been enriched with stable manure this works out and results are satisfactory, because the plant starts on the commercial fertilizer and finishes up on the stable manure. But if the ground is infertile, by the time the plant gets ready to bloom it has nothing to feed on; the available plant food has all gone into the making of the plant. To put it differently, if all the fertilizer is applied at the time of planting the result will be some fine foliage and mighty few blooms.

Always see that the plant has plenty to feed on *at the time of budding*.

2nd. Planting Dahlias in a heavy

soil with a clay sub-soil will almost always result in an abundance of foliage and inferior flowers. This rich, black, heavy loam possesses a certain fascination for the amateur horticulturalist, but if I want my Dahlias to bloom profusely, and I have any choice in the matter, I pass it by. The plant itself will make a tall, rank, fine appearing piece of evergreen, but what we all want to see amidst the green is color.

Always select for your Dahlias a well drained piece of ground with a light sandy loam. This does not mean that Dahlias will not do well in heavy soil, for they will; but if they do you will find such a piece of ground is always well drained with hard pan at least three feet below the surface.

3rd. Suppose your plant has for weeks made a splendid growth; good size, sturdy stalks, foliage glossy and green. The small buds appear, you pat yourself on the back and look forward with keen pleasure to that bouquet for the front parlor; but that time never arrives. On looking carefully at the buds you see some small black spots. Other buds have turned completely black and dried up in their infancy. Still others have managed to struggle along to a sort of crippled maturity, the petals being spotted on one side of the bloom while on the other side there won't be any petals at all, spotted or otherwise. It is extremely irritating. Instead of patting yourself on the back you end by kicking yourself, or anything else handy.

The cause of this is an insect, that we call around here the chintzbug. The damage is caused, not by eating, as is generally the case with bugs, but by sucking the plant juices. This pest gets in its work early, late bloomers generally escaping its ravages.

I have found no completely satisfactory weapon for this pest, but spraying will hold it in check. Use any good insecticide that can be procured in powdered form, tobacco dust and powdered arsenate of lead, being perhaps, the best. Do not fail to apply *early in the season*.

One thing more: Plant your Dahlias in the open, and if you are planting any quantity, run the rows north and south. If decoration around a building is desired, choose the south side. Dahlias bloom best with plenty of evenly distributed sunlight.

### Rooting Dahlia Cuttings.

Early in March I take the roots out of storage and bed them in sand or sandy loam on a greenhouse bench. After two or three weeks when the sprouts attain a length of 3 or 4 inches, I cut them off and root them in sand just as other soft wooded plants are propagated. The cutting should be cut just below a joint, the lower leaves trimmed off and the upper leaves cut back. As soon as the roots are formed the plants

are transferred to pots of soil and grown on until it is time to set them outdoors, say in June.

W. A. ORTON.

*Note by the Editor—*

Not all of us have a greenhouse, but some have facilities which would answer the purpose of a greenhouse for the rooting of Dahlia cuttings. The pot grown cuttings are by Dahlia experts considered the very best way of producing fine bloom. Those who have suitable conveniences would do well to try this instead of growing from the tubers as is ordinarily practiced.

### Gladioli for Forcing.

The first planting of the large-bulbed varieties can now be done and do not omit a good number of that inexpensive, but excellent scarlet variety *Brenchleyensis*, in addition to *America*, *Augusta* and *Mrs. F. King*. For a good Memorial Day crop Gladioli should be planted now in benches. The market for these is usually good in April and May, and fairly good in June, and there is not much likelihood of spikes being wasted even though a good many of them flower before and after Memorial Day. Of course, so much depends on climatic conditions that it is not easy to hit the date just right with this crop. Do not use any fresh manure which will come in contact with the bulbs. If you have no old manure, try fine bone and pulverized sheep manure, incorporating this well with soil. Again, the bulbs do not flower at one time, which is generally an advantage. They do well in from fifty to fifty-five at night.—*Horticulture*.

### GLADIOLUS—MONGOLIAN.

[Subject of illustration on front cover page.]

Originated by A. E. Kundred, Goshen, Indiana, and sent out to a few growers on trial in 1912. Entire stock purchased in 1913 by C. W. Brown, Ashland, Mass.

Shown at Massachusetts Horticultural Society's show and awarded a Certificate of Merit, August, 1913. Introduced in 1914.

Described by Cornell Trial Grounds as follows: Lemon yellow with dull Tyrian Rose pencillings and a small blotch, slight feathering of rose in segments. A compact bloom of medium good substance. Five to seven blooms open at one time out of doors, and eight to twelve in water. Early to mid-season, medium tall, erect, vigorous.

### Wood Ashes.

We have many questions about the value of wood ashes. There is no doubt about the benefit from using a pure unleached ash. We doubt if any combination of lime, potash and phosphoric acid can be put together which will give as good results as equal parts of these elements in a pure ash.—*Rural New Yorker*.

It is hoped that after our long period of low temperature that we will have an early and mild spring. A favorable spring is surely due us as compensation for the spring of 1917.

## A Roseless Garden.

BY T. DABNEY MARSHALL, (Mississippi.)

[Written expressly for *The Flower Grower*.]

### Note by the Editor—

In this article Mr. Marshall offers some suggestions for flower gardens which will prove especially useful to the person who is laying out an entirely new proposition. His article is somewhat of a stricture on the rose, but let the rose people speak up and defend their favorite. The columns of THE FLOWER GROWER are always open to reasonable expressions of opinion and helpful statements of facts.

"I've bought the lot next to mine," I said to my friend. "It's fifty by one hundred and fifty."

"What for?" he asked. "An investment?"

"No; to raise flowers."

"What kind of roses will you plant?" he asked, as if you could not have a garden without roses.

"No kind," I answered, irritably. "I said I wanted to raise flowers. I do not care for beetles and blights. Neither do I care to open a boarding-house for bugs and bacteria. I do not wish to invest in vermine, aphine, insectine, nic-o-teen, nor Paris Green, nor arsenate of lead. I am planning a flower garden—not opening a drug store.

"Besides, I wish flowers out in my garden from Washington's birthday, late in February, until the first killing frost in November. During all that time I desire my garden to be a blaze of beauty, a tangle of perfume, the home and haunt of bees, birds and butterflies. I even hope that some blooms will lift pale, pleading faces to the icy skies of December and some more daring will flash back the flare of January sunsets with hues as vivid as their own."

"How will you accomplish this without roses?" he stubbornly persisted.

"I couldn't accomplish it with roses," I persisted as stubbornly. "They don't bloom in the open in February in this climate. No, even if the bugs and bacteria were considerate enough to spare them."

"How will you do it, then?" he asked.

"With bulbs, tubers, corms and rhizomes."

"With what?" he asked in amazement.

Ignoring the interruption, I continued. "First, when bells are pealing forth the announcement of Washington's birthday, the old-fashioned single yellow *Von Zion* Narcissi shall blow with their trumpets of gold a fanfare for the dancing feet of spring. Before their sheen is tarnished, the *Sir Watkin*, that best of all daffodils for the South, shall inlay the earth with patines like those with which the stars pave the skies, when the young-eyed cherubim sing for joy. They will just have passed their prime when the bicolor, *Empress*, almost as hardy as the *Sir Watkin*, will display her silver and gold. She will but lead the way for the triumphal entry of the *Emperor*, *Glory of Leiden* and *Olympia*. By this time the *Poetaz* and *Leedsii* sections will begin to flower. The best of these are the *Poetaz*, *Elvira* and the

*Leedsii*, *Mrs. Langtry*. I almost forgot to mention the *Barrii Conspicuous* with golden trumpet edged with scarlet. It blooms along with the *Empress* and must have been in Shakespeare's mind when he spoke of the daffodils that come ere the swallow dare and take the winds of March with beauty. These will carry us well on into April—giving more than a month of continuous bloom. During the last days of March and on until late in April we will have those most gorgeous of all Spring flowers, the magnificent *Darwin* tulips. Where have you ever seen such rose-scarlets, crimsons and salmons as are furnished by *Mrs. Francombe Saunders*, *Gesneria Spatula Major*, *Clara Butt* and *Pico-tee*? What if they don't live from year to year? What if you should have to plant them each season? They cost but from one dollar and a quarter to one dollar and seventy-five cents a hundred. Think of getting a hundred blooms like *Pride of Haarlem* for one dollar and a half!

"Towards the end of April and during the first week in May the English and Spanish Iris will be in flower. Dainty, delicate, graceful they will seem a hundred out-door orchids. They will last until the *Candidum* and long-*iflorum* lilies lift their spires of green from which golden-hearted bells of silver shall pant forth a music 'so delicate, soft and intense that it seems an odor with sense.'" In the meantime, if the Fates are in any way propitious, the Peonies will flower all the way from the first of May until the middle of June. They are, however, not adapted to the climate of Mississippi. It is too hot for them. Sometimes they bloom and sometimes they don't, but oftenest they simply don't. But when they do bloom! Say, have you ever seen a really fine clump of *Festiva Maxima*, *Jules Elie*, *Souvenir de l'Exposition de Lille*? If you have, then you have seen some flowers. Great balls of snow and rose and sulphur sweeter than all the honies of Hybla. When you look on them, when you inhale their fragrance, when they literally enchant you, you will forget that there was ever such a thing in the world as a rose. I mean to have me some of the old-fashioned *Offinalis*, *Rubra* and *Rosea*, besides about a dozen of the newer sorts, put forth by Kelway, Calot, Lemoine and the Americans, Richardson and Brand.

"I shall also be guilty of the extravagance of separating myself from five hard earned simoleons and buy one of those gorgeous things which appear in Bertrand Farr's catalogue under the

name of tree peonies. I am buying it for the benefit of my unborn grandson. He may live to see it bloom. And, may-be, too, when, fifty years after my death, my wandering spirit is permitted to visit again 'the pale glimpses of the moon,' I may see a great, gorgeous clump loaded with super-blooms like those made out of printers' ink. But, seriously, between you and me and to go no further, I doubt it. For you will find it no lie, that the finest flowers do not grow in gardens of the loving amateur, nor in the green-houses of the great, but only in the catalogues of the seedsmen and florists. Turn a printer loose and he can beat a gardener every time.

"But it will be in June that my garden shall be at its finest. For that is the season, in this section, of that most satisfactory, most reliable, most hardy, most beautiful and most gorgeous of all flowers, the *Gladiolus*, the undoubted King of the flower world. Can morning skies display such splendours as are theirs? Can the cunning hands of chemist discover such hues as glitter on their petals? Scarlet and crimson, rose and salmon, violet and mauve, purple and pearl has the Lord given them, and theirs also are the luster and the sheen of sea shells and coral. First in the long procession of beauty will be *Pink Beauty* and then *Halley* and *Lily Lehmann* and *Baron Hulot* and later *America* and *Mrs. Francis King* and a hundred others, each more beautiful than the other.

"I shall have masses and masses and masses of that most superb of them all, *Mrs. Frank Pendleton*. I have already grown them five feet tall in my old garden under poor conditions and I believe I shall be able in my new garden to coax them up to six feet, with a dozen blooms open at one time on a stalk. When they come into flower and you ride out to see them, you will think you are not looking upon mere earthly blossoms, but will imagine that old St. Peter, in a moment of forgetfulness, must have left open the gates of paradise and you see a host of heavenly butterflies that, escaping the eager pursuit of the young cherubs, have taken refuge in my garden and enchanted lingered there in its golden airs. *War* shall flash his flag of flame, *Peace* unfurl her banner of snow. Clad in purple the *Baron Hulot* shall walk beside *Lily Lehmann* robed in silver. *Primulinus* hybrids shall mingle their grace of form and delicacy of color with the too sturdy and almost too gorgeous varieties that Mr. Kunder has evolved. Of course, I would like to have *Mrs. Dr. Norton*, *Madame Mounet Sully* or even one of Richard Diener's thousand dollar corms, just as I would like to have *Koor-in-Noors* and pigeon-blooded rubies. But if I bought these it would take so much money that I would have to go without eating for a year, and I do not wish to commit suicide by starvation. It is too lingering and disfiguring a death. Besides, I am so much in love with life that I would not die for a dozen *Mrs. Dr. Nortons*. Why

[Concluded on page 23.]

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

MOTHER WEST'S DOVE.

[Landscape Gardener.]

MY NAME IS DONALD WEST and I live "somewhere" in Ohio. Our immediate family consists of mother, two sons and myself. We are all nurserymen. The boys perform the manual labor and I, being a dove, superintend them and mother looks after us all. I belong to her and she is very proud of me. She says I am of the specie spoken of as the Ring Dove. I don't feel quite sure about it because the ring is missing on me, but some people call me the sacred dove which pleases me. Mother and I are very dear to each other, having lived together ever since I came into this world, and it was nearly thirty-five years ago that I pipped my shell down in Vanderbilt, Pa. I feel somewhat aristocratic being raised in a town of that name and think it should entitle me to entrance and good standing in the most exclusive circles. But I don't care much for society, I am very much a home bird and interested in our business, which I enjoy because it is both practical and beautiful.

We do quite a bit of regular farming which helps out our "Sammies" but about fifteen years ago we began growing standard fruits and fruit plants. We did our own propagating; the standard fruits by the method of budding (which is quite an art and very interesting. I'll tell you all about it some day) and the small fruits by cutting and layerage, and soon grew a fine stock. It was not long, however, until we realized the great field in "Landscaping." I made the discovery, for one day I went for an unusually long flight. I circled over the country taking bird's-eye views of many interesting things. I was gone so long that they thought I was lost or a cat had eaten me, (every one blames the cat when a bird is missing, but I'm much more afraid of a hawk) and when I arrived home, Mother was in tears. I was tired and hungry and puffed up with importance and exclaimed: "It's just like a woman to make a fuss! Where's my supper?" And after supper I winked to the boys to come to the office, and I flew upon the desk and spread my feet apart and stuck out my wings so they looked like a man's elbows when he has his thumbs in the armholes of his vest, and addressing the older one, I said, "See here, Bill," (Mother calls him Willie, and other people say William, but he is such a genial, big hearted fellow, and I wanted to make it so impressive, I just had to say Bill) "that bunch of homes over there that you call a city, looks like a settlement of cliff dwellers." William looked amazed, and said: "What's the matter with you, Donald? Explain yourself." And then I told him all about my trip and how I had taken it

entirely in the interests of our business. And how I had observed that, although the buildings were very good, and lawns well clipped, there was a lack of shrubbery, and vines and no evergreens to speak of. I pointed out the necessity of such plantings to relieve the bareness and give the places a homey look, and he replied, "I believe you are right, Donald, and we will begin right now to make a study of their needs." So here we are, full fledged *Nurserymen and Landscape Gardeners*. I have always worked right along with the boys, often making valuable suggestions—which they always heed—so I can plan and lay out grounds as well as they.

I took a flight quite recently to have a look at things in winter time and came home almost discouraged with people in general. Mother Nature first had the winter landscape beautifully dotted with various shades of green, but all that had been destroyed and not replanted, and now there is such a sameness white and gray, white and gray everywhere. I wonder if people ever will wake up to the value of evergreens. This educating the public makes our work very heavy.

There is one thing that I especially like to see, and that is a row of shrubbery as the boundary line, side and back of the back yard. Of course *your* back yard is well kept but your neighbor's barn may be almost on the line and he stands his ladders up against it and throws his empty cans back of it where he cannot see them and forgets that they are very conspicuous from your place. I know of a case like that and I said: "Why don't you plant lilacs and other tall growing shrubs there and hide that rubbish?" And while they were doing it the neighbor became interested and soon there were two rows of shrubbery dividing those back yards.

There are so many beautiful vines, trees, shrubs, plants and bulbs that blend so harmoniously. We use Peonies to good effect and lately have found that Gladioli are wonderful brighteners for dark corners. The work of even small plantings should be entrusted to one who has made a study of this particular branch and has the knowledge and ability to combine and blend them so as to get the most out of what he has to work with. Remember that I, Donald, am at your service.

MRS. A. H. AUSTIN.

### War-time Prohibition.

Editor Florists' Exchange:

In two of the trade papers there appeared, a week or two ago, reference to meetings, parties or dinners of florists or plantsmen at which wine or liquors were strongly in evidence. As a woman in favor of war-time prohibition, and one deeply interested in the

welfare of the horticultural profession, it occurs to me to ask this question: "Why should these men show anxiety concerning present business conditions when they do not hesitate in times like these to spend freely upon non-essentials, such as alcoholic drinks?" There is an inconsistency here which might be explained.

I should like to suggest, for the consideration of Mr. Young and those in charge of the New York Flower Show in March next, the abolition of the apartment on the right-hand entrance of the Grand Central Palace where, during past shows, it was only too evident that drinking was going on. Such a place has no connection with the delightful sights on the upper floors, and is nothing short of an abomination next to a flower show. Nothing could more surely offend the general public this year than the presence of a feature of this type in a place of the kind. I have often thought of these things but have only now found courage to express my opinion. May this be taken in good part.

MRS. FRANCIS KING.

### The Hardy Phloxes.

The Phloxes are one of the most useful hardy plants we have, and for late summer and autumn blooming they are indispensable. Their wide range of intensely brilliant colors includes almost every shade but yellow, in the most varied and striking combinations imaginable.

No flower has been more wonderfully improved of late years, and the immense size and perfect form of some of the new varieties will be a revelation to those who have heretofore seen only the old-fashioned kinds. Phloxes are effective either as single specimens, small groups or large beds on the lawn. They produce a beautiful and harmonious contrast when massed against a background of shrubbery.

Phloxes require a rich soil to produce the best effect, as they are gross feeders. They like plenty of moisture, and in dry seasons should be plentifully supplied with water. Unlike most flowers, they will thrive in partial shade, where the colors are brighter and endure longer than in the open sunlight. Their natural season of bloom is July, August and the first of September, but by pinching out the tops of part of the plants before buds have formed they will bloom much later, and form many branches.

W. E. FRYER.

One of our correspondents calls attention to the fact that Mr. Stalnaker in his article in the January issue speaks of dropping freshly dug bulbs into a bag and tying it up. Mr. Stalnaker was not giving directions for digging bulbs especially, but speaking more of labor saving devices. It is, we believe, well enough understood that Gladiolus corms should not be packed tightly nor stored in large bulk until they have had a chance to dry out or cure.



## THE PEONY

### Screens for Peonies.

[From *Horticulture*, Boston.]

The varieties of Peonies desirable in a small garden need screens for several reasons:

First. At blossom time the atmosphere is in a disturbed condition, violent rains are common and hail not infrequent. Either ruin the flowers. Rain makes them so heavy the stems fail to support them, and browns the petals. After a violent storm the Peony garden is a heart-breaking scene, unless screened.

lifted for the occasion. Surely the king of flowers is worthy of as much care as Azaleas or Chrysanthemums. Usually the mistress of the house decides upon the arrangement of the house garden. If she considers screens disfiguring, then plant a little Peony garden in the forest, especially for screened Peonies, as shown in the illustration. The plants in the middle foreground are *Duff* and *Therese* received from Shaylor in the fall of 1915. They show what to expect of well-grown roots the second summer. The size can be seen from the framework of the screens.

tops of the uprights, to which they are fastened by screws to admit of quick erecting or removal. Where storage space is available, the whole roof frame with its attached sockets should be kept as one piece when removed, and if they are stacked one above the other, fifty occupy but little floor space.

The roof covering is made of cotton drilling dyed of suitable tints to more or less exclude the actinic rays of the sun. At each corner is a grommet. To fasten the cover in place on the frame, cords are passed through the grommets and the eyes on the ends of the rafters, and tied. To ensure driving the uprights in the correct positions to receive the roof sockets, a form of wood in two pieces is laid on the ground, which has a guide slit at each corner, into which the end of an upright is inserted and driven a foot into the ground with a wooden mallet. This sounds complicated but only six minutes are required for the complete erection of a screen. As the Peony shows always make new converts to Peony culture, it is a suitable time to call the attention of those contemplating planting this fall, to the importance of screens, that they may be made during the leisure hours of winter.

WILLIAM ROLLINS.

### Peonies from Seed.

Comparatively few of our finest named varieties of Peonies ever produce any seeds in the U. S. I have grown Peony *Officinalis Rubra* for more than sixty years, but never could find a seed. Some others seed pretty freely. All single Peonies as far as I know, produce seed freely. The seed, if planted as soon as ripe before the shell hardens, will nearly always grow the following spring. A single Peony bloom five or six inches in diameter of gorgeous color is a flower not to be despised. Watching seedlings of Peonies, Gladioli or other choice plants develop is interesting.

E.

One day last fall the Editor was fortunate enough to be able to cut perfect spikes of both *Badenia* and *Mrs. Dr. Norton* Gladioli, and these were displayed in a vase together. Anyone who has doubt about the beauty of either of these varieties should have seen these two in contrast. They are, of course, totally dissimilar, but yet the effect was the more striking. *Badenia*, as we all know, is almost out of the question on account of its being so subject to disease, but it is surely a fine thing when well grown. *Mrs. Dr. Norton* is so new that but few of us have seen it, but as it is a rapid increaser we expect to see much more of it in future.

SCREENS FOR PEONIES.

Second, All the most lovely light varieties fade quickly, many before they are fully open if the sun is bright. To preserve these delicate tints, Peonies are usually cut as buds at evening, kept over night in a cool, dark place and placed in the vases in the morning. This is the correct way to treat them unless they are grown under screens, but they never come to their full beauty in this way, because they have no nourishment beside water. The finest blooms can only be obtained by maturing on the plant. Moreover, though cut flowers are decorative, the true gardener gets his pleasure from well-grown plants with perfect flowers. Peony shows will never be artistic until the plants for exhibition are grown in large tubs sunk in the ground and

The uprights are four feet above the ground, and about three feet apart.

The screen represented consists of an iron frame and a cloth cover. A frame has four uprights of cylindrical iron, one-half inch in diameter, five feet long for the majority of Peonies, six feet for the tall growers. The roof has four rafters of cylindrical galvanized iron, one-quarter of an inch in diameter, three feet three inches long for the smaller plants, four feet six inches for the wide spreading varieties. The four rafters are held together at the apex of the roof by a cross-shaped bronze casting into which they are screwed. Each at its outer end is screwed into a bronze-eye. They are attached to the uprights by bronze castings made hollow to receive the



## The Flower Grower

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### Patriotism, Pigs and Posies.

It must be admitted that the subject chosen is a rather unusual combination, and it may need some explanation. Everybody knows what patriotism is, and in these war times especially it should stand first in the thoughts of every citizen. Likewise everybody knows what a pig is, and while possibly not everyone is equally familiar with the word posies, surely the older ones and especially the old-fashioned ones, know well enough what posies are. The word is not in very common use at the present time, but posies is the homely word which was used for all kinds of flowers in years gone by.

Pork, we are told, is one of the chief elements necessary to insure the winning of the present war, so the relation between patriotism and pigs is easily understood. It may be a far cry from pigs to posies, and we are not going to try and prove any great bearing of one on the other, but rather suggest that people who raise flowers may easily add swine to their activities, and in that way prove their patriotism in a practical way.

Mr. Hoover, our food administrator, says: "We need a 'keep a pig' movement in this country—and a properly cared for pig is no more insanitary than a dog." Of course it is not possible that every flower grower can raise a pig, but we believe we are safe in assuming that fully half the people who grow flowers either commercially or for pleasure are so situated that they could raise swine, some of them not simply one pig but a plurality of them.

Further we want to suggest that the raising of pigs is a natural adjunct of gardening, not especially flower gardening, but all kinds of gardening, both vegetables and flowers. The natural waste from a vegetable garden can be fed to swine and turned into a profit, and in these war times every little thing should be saved and how better can garden wastes be saved than by the pig route?

We have still another argument in favor of combining the raising of swine with flowers. Who would attempt to grow flowers without a liberal supply of suitable fertilizer, and where is there a more suitable fertilizer than pig manure? Those who dig in the soil and are actually in contact with flower growing will not, we trust, be shocked by this plain statement of fact. The opinion of those who are so superficially interested in the subject that they have not dug in the soil, and thus come in direct contact with the subject, is not worthy of consideration.

It is admitted that flower growing is a "non-essential pursuit" but flower growers need not neglect their favorite work because of war times. Instead of curtailing their flower growing they should simply add to their activities the raising of swine. If this war continues for a year or two yet, the "non-essentials" must be curtailed or eliminated, and flower growers to justify their existence as such, should balance their activities by the production of some product essential to the maintenance of the world. Mr. Hoover says that the three most important things necessary to win the war are swine, ships and wheat; and please note that he places swine first.

How can flower growers or any one else suitably located help win the war any better than to start in the swine business? Now, we must admit right here that there is a personal interest in this subject from the fact that the editor is engaged in the raising of pigs as a side line. Flower growers, try it yourself and see if you do not like swine. There are human traits about them that are altogether likeable and remember that a patriotic purpose is being served with every pig that you raise. Let us say nothing about the possible profit, but you need not infer but what there will be a good profit if you use as good judgment in the handling of swine as is necessary in the success of any other business enterprise.

It is but a little over two years since we became interested in this subject and we now have upwards of one hundred head of swine, big and little. To brag a little (and who does not like to tell of his own successes) we had seven young sows farrow last fall with their first litters and they had fifty-seven pigs or one better than eight pigs each and these sows have raised to weaning age more than an average of seven pigs each.

What breed should you raise? Any breed that looks good to you is the right breed and whether the swine you raise are pedigreed or mongrels, they will appeal to your affection as well as to your financial interest and patriotism. Subscribe for a good swine paper at once and study up the subject and arrange in the spring to buy and raise at least one pig.

MADISON COOPER.

### Where Do New Varieties of Potatoes Come From?

Those of you who have read J. G. Holland's beautiful poem, "Bitter Sweet," will remember David's little discourse on "Compensation," in his conversation with his sister in the cellar. When he comes to the potato bin he discourses of the merits of the "Carter" potato, winding up with the quotation: "Small potatoes and few in the hill." I remember when that was thought to be almost the only really fine, mealy potato, but it was just as David said about its yield. At that time we had the *Neshannocks*, fine but with a purple tint and rotting very badly. Then along came the *Dover*, a red, mealy potato but boiling to pieces. The *Jenny Lind* was an enormous kind but no good for the table. Then there were the *Peach Blow* and other sorts, most of which are gone forever, "run out." How is this? There is a theory that all potatoes are but parts of the original seedling and that though a potato planted this year may seem to be only five months old, it is really as old as the time when the original seed was planted. However this may be, it is certain that varieties do often run out. Some years after the time I referred to there appeared a variety called, I think, the *Garnet Chili*, which I think was obtained

from South American seed, that being the home of the original potato. I am not well informed as to the details but have an impression that many of our new potatoes originated about that time and from that source.

Potatoes do not sport to any extent and if they did the sports would be as old as the original; so new varieties must be got by sowing seeds. Where shall we get seed? Years ago "potato balls" were so common that boys used to amuse themselves by putting them on sharp sticks and throwing them at each other. Lately, though potatoes blossom freely, potato balls are seldom seen and probably nine out of ten who might read this never saw one. I have looked at some of the blossoms but did not find any developed stamens, bearing pollen, and that may be a reason why they do not seed. The primary reason for whatever defect there may be in the flowers is probably that the *Early Ohio* and other now popular varieties are already beginning to "run out." An article has been going the rounds of the magazines that there is a standing offer of \$25 for potato balls. This is not true but started from the statement that Prof. Gully at the Agricultural College at Storrs, Conn., in a lecture delivered some 14 years' ago, offered to give \$25 for a potato ball, fully developed, grown in Connecticut. The hearer thought he could get them at once but has never found

them yet. However, though potato balls are rare and surely vanishing, they are still produced in some parts of the country and one seedsman is obtaining them in considerable quantities and offering them for sale. The writer does not know where he got his start but makes a guess that some Peruvian stock may have been used. It seems probable that new varieties obtained from these hybridized seeds (every seedling is theoretically a separate variety) will themselves bear potato balls. It takes about three years for the seedlings to become fully matured but good, large potatoes are sometimes produced the first season and a great number from one seed. It will certainly be very interesting and some valuable new kinds may be obtained.

GEO. S. WOODRUFF.

The unusually cold weather experienced during the present winter has resulted in the complete loss of the *Gladiolus* stock of one commercial grower that we know of. We trust that others have not been seriously damaged.

We would suggest that a thermometer should always be used in storage cellars. Don't depend on anything else but a thermometer and be sure that you get one that reads correctly. When the weather is severe, watch the thermometer, and apply artificial heat if necessary.

### The Glad Philosopher's Musings.

Haven't you ever wished you had a beak like a chicken and a chicken's ability to use it rapidly when engaged in the tedious work of picking up bulblets?

One runs across amusing things occasionally in books that have serious intent. In his book, "Popular Garden Flowers," Mr. Walter P. Wright directs that *Gladiolus* corms be planted "about a foot apart." What a vast acreage the English commercial grower would need were he compelled to "go by the book."

Profanity doesn't help matters one bit when, after you have emptied a tray of bulbs, you discover that you emptied them into the wrong lot because you looked at the label after, instead of before, you dumped them.

The differences of opinion and resultant controversies over the proper pronunciation of the word "*Gladiolus*" has somewhat confused the general public, so that many of our friends venture their pronunciation with fear and trembling, but the Philosopher is always considerate, and never embarrasses by offering any correction if the friend's pronunciation differs from his own. Some rather amusing ways result from the tongue-twistings that many undergo when endeavoring to be correct. Several of my friends invariably pronounce it "Glad-oh-lia," and once in a while someone goes one worse with "Glad-doil-ya."

Coming up street one evening with

a big basket of cut blooms I was accosted by a group of children at play with: "Hey, mister, give us a lily," and a friend to whom I had sent a box of cut *Gladioli* acknowledged its receipt later with a polite note thanking me for the "beautiful orchids" I had sent her.

As I was bringing in a large bunch of cut *Gladioli* one evening, a little Italian boy, standing at the bottom of a stairway called out, "Mister, won't you give me a flower?" When I handed him one he ran up stairs in great glee to give it to his mother. A few days later in passing the place I observed a wreath of flowers on the door, and when I read my evening paper that night I learned that the little Italian boy had been run over in the street by a heavy truck and killed. Was I glad that I had given the little fellow the flower? I would have been sorry if I had not.

THE GLAD PHILOSOPHER.

### The Future of Flower Gardening in America.

By DAVID BURPPE, before the National Association of Gardeners at Chicago.

There are two important phases to the development of flower gardening which I want to emphasize. We might call them the practical and the popular. By the practical side of gardening I mean the development of actual gardening itself—the science and the art of gardening, not only the improvement in methods of culture, but also the development of new and improved types of flowers and ornamental plants. The development of the art of flower gardening through the ages past has followed closely the development of the human race itself. As mankind has become more civilized and more re-

finer, as we have gotten away more and more from the caveman stage, the æsthetic side of our nature has developed and our spirit has cried out more and more for that which is beautiful. It is this ever increasing desire for the delicate beauty expressed only by flowers that has justified and has even compelled the development of flower gardening to its present stage.

I believe, therefore, that the popular side of flower gardening is more important than the practical—the desire for the beautiful is more fundamental than the means by which we may obtain it. It would be ridiculous to suppose that progress could be made in any line of endeavor without first having kindled the fire of desire.

In years past great mystery surrounded the work of the professional gardener. He had gotten his experience through long years of hard knocks and he was loath to tell the amateur the whys and wherefores of his art. The practical side of flower gardening was left almost entirely in the hands of the professionals. But as the desire on the part of the amateur became greater and greater, he began to delve more and more into the mysteries of flower gardening. Some professionals seemed to think that this would work a hardship on them, but in reality it has broadened the field for their profession.

This general tendency towards the growing of flowers should be encouraged by all. It is merely the expression of a great desire on the part of the human race which must be met and it grows stronger year by year. It is like a snowball that starts to roll at the top of the hill and grows greater the further it rolls. There is a cumulative effect. The more we grow flowers the more demand there will be for flowers and the more demand there will be

(Concluded on page 24.)

## Cornell Bulletin on Gladiolus Corm Diseases

REVIEWED BY S. E. SPENCER.

[Written expressly for *The Flower Grower*.]

Several years ago at the request of Mr. Arthur Cowee, the New York Legislature appropriated a special fund of two thousand dollars and placed it at the disposal of the department of plant pathology of Cornell University Agricultural Experiment Station for the purpose of investigating Gladiolus diseases, and last September bulletin, 380, was issued entitled "The Hard Rot Disease of Gladiolus."

In this pamphlet of about 30 pages, Mr. L. M. Massey tells the story of a long series of experiments conducted first at the University and later during the summer at Meadowvale Farm, Berlin, N. Y., for the purpose of discovering the cause of the disease and if possible finding a way to control and cure it.

For some years, owing to the importation of diseased stock and the sale and exchange of bulbs among growers, the hard rot disease had been spreading until the loss was in the aggregate very large, in some individual cases running as high as 25 to 50 per cent. Many of the remaining corms while apparently sound and healthy were slightly diseased and if planted reproduced only weak, undersized and diseased stock.

Several prominent students of fungus diseases had been consulted but were unable to explain the cause or suggest a remedy.

Some growers advised treating the bulbs with solutions of various kinds; some used lime or sulphur at planting time, but because they had no accurate knowledge of the nature of the disease and the method of infection and did not use accurate and scientific methods in making experiments, all efforts were useless and the disease continued to spread.

The first important fact established by Mr. Massey is that a leaf blight which sometimes develops on the foliage of seedlings and bulblet stock is *one stage of the hard rot disease*. This blight which rarely appears on the foliage of large bulbs, is indicated by small dark spots which gradually spread till they form rings of reddish brown or almost black, with light gray centers. Later on these centers may drop out producing a "shot hole appearance." [This should not be mistaken for a similar leaf blight which affects large plants, and is caused by the bite of the tarnished plant bug. The resulting discoloration is *dark* in the center with a *light colored* ring. It is not a disease but is injurious to the bulb in proportion to the amount of leaf surface destroyed.]

"The hard rot disease of the Gladiolus is caused by the fungus pathogene *Septoria Gladioli* Passer. Passerini collected specimens of the leaf stage of the disease near Parma, Italy, in June, 1874." Mr. Massey has proved that spores from diseased foliage will infect bulbs, but it is also proven that

these leaf spores are not necessary for the development of hard rot. "The fungus does not grow directly from the old corm into the new one." Where the leaf stage is not present, the normal progress of the organism is from the black diseased spot on the bulb into the soil and then back into any near by corm. When a diseased corm is planted in the spring, moisture and warmth stimulate the growth of the fungus and small pieces or spores are pushed out into the soil where they may remain alive for at least *four years*. The new corm growing out of this diseased one *may escape* and develop a healthy plant, but the chances are three in four that it will be attacked by one or more of the young and sprightly Septorias, and 25 to 50 per cent of the bulbs grown in the next four years in soil so infected will also be attacked.

When these corms are dug in the fall they may not show any outward signs of disease but if the husk is stripped off we may find one or more dark watery spots usually on the lower half. If the bulbs are cured well and conditions are not favorable to the development of the disease these spots will dry up, a callous will form around them and the black portion may be picked out.

But it frequently happens that the disease develops rapidly while in the ground and after digging, so that when we clean and sort the corms it is easy to pick out some that are badly affected. These should be burned at once.

Other corms, as mentioned above, may have under the husk small dark spots where Septoria has found a home and is growing in the cellular tissue. Under favorable conditions the brown spots increase in size, the center becomes hard and black and if numerous enough the lesions run together till by spring a considerable part and perhaps all the body of the corm is dry, hard and dead. This condition can always be detected by the looseness of the husk. But in case the lesions are few and small there may be nothing to indicate disease unless the husk is stripped off and the corm is likely to be planted the following spring and the process of growth and soil infection is repeated.

Now the important question arises, how can this troublesome disease be controlled and cured? Mr. Massey has proved by a long series of experiments that healthy corms may be planted year after year in soil free from infection and remain perfectly healthy; and healthy corms planted where diseased corms have been grown will produce a large per cent of diseased bulbs.

No treatment has been discovered which will prevent infection or kill the organism in the diseased tissue without injury to the corm. Formalin and corrosive sublimate in solution, formalde-

hyde gas, hot water and hot air have all been tried without success.

Various chemicals, lime, sulphur, acid phosphate and soot have been applied at planting without benefit.

Diseased corms and foliage, roots and rubbish from a crop that is in any way infected should be either burned or composted and used at some distance from the Gladiolus field. Leaf blight in seedling and bulblet stock may be controlled by spraying with bordeaux mixture to which has been added a small quantity of resin and sal soda crystals dissolved in water to cause the spray to stick to the foliage.

All growers should continue experiments along this line until some chemical or special treatment is discovered which will prove to be a sure and safe remedy.

Mr. Massey concludes that "Selecting healthy corms and growing them in soil free of pathogens is the only means known that will give an absolutely healthy crop."

To growers with a limited acreage he suggests the selection of as many healthy corms as possible, planting them in clean soil. The second year add more healthy stock and so gradually work away from diseased stock and infected fields.

We owe a debt of gratitude to the State of New York and its Agricultural Experiment Station for the generous way in which they provided for this investigation; to Mr. Massey and his co-workers, Prof. Whetzel, Dr. Reddick and others, for the thoroughness with which they worked out every detail; and to Mr. Arthur Cowee who first suggested the appropriation and then gave the use of fields for extensive plantings and his studio for use as a laboratory.

*Note by the Editor—*

Mr. Spencer has promised us in addition to his careful review of the Cornell Bulletin above referred to, that he will also review Cornell Bulletins Nos. 9, 10 and 11, Gladiolus Studies Nos. I, II and III, by A. C. Beal and Alfred C. Hottes. The idea is to put the information in condensed form so that those who have not the bulletins available, may at least get a summary of the information in the form of Mr. Spencer's outline or review.

A. E. Kunderd, Goshen, Ind., will make an attractive prize offer for the best display of the Kunderd varieties of Gladioli at the next flower show of the Massachusetts Horticultural Society next summer as follows:

For the largest and best collection of the Kunderd varieties of Gladioli: First prize, a Gold Medal. Second prize, 100 corms of the variety, *Mrs. Frank Pendleton*. Third prize, 50 corms of the same variety. Fourth prize, 25 corms of the same variety. Second largest collection may secure first award if quality of bloom justifies it.

## WAYSIDE RAMBLINGS

### DOUBLE GLADIOLI.

Noting in a flower magazine recently a request for information as to Gladioli having double blooms, or a tendency to develop double flowers, perhaps the readers of THE FLOWER GROWER will be interested in two instances coming under my observation:

At one time I bought a bulb of *Sulphur King* which bloomed and multiplied. On planting the second year it blossomed again and produced a bloom tending toward dualness. The first blooms to open were double and so on up for two-thirds of the length of the flower stalk. If one could imagine a perfectly formed Gladiolus, but like a narcissus, with a collar at the throat like the tube of a narcissus, an inch in height, which showed itself prominently, one could get an idea of what this bloom was like. I saved the bulb and replanted it in 1917, but this year it did not bloom, but owing to improper marking I do not know which that bulb is, among those stored away for 1918 planting.

Another bulb was of a variety of which I do not know the name, as it was not a named sort. It was in color a vivid pink, on the red cast. This produced a stalk in 1917, only one blossom of which came double. This flower consisted of ten petals, divided into two rows, five in the bottom row, five in the top row. The bottom row produced three petals at the top and two at the bottom and the other one was arranged two at the top, three at the bottom. Despite the curious growth of this double flower, both flowers were of great beauty and perfection of form. The bloom was a large one.

If either of these bulbs should throw double blooms in 1918, I shall try to make a further report on them.

ESTELLE M. GILBERT.

### FOR BETTER CATALOGUE DESCRIPTION— SCHWABEN AND LILY LEHMANN.

Experience is the one thing we are forced to rely on and all the growers combine, it seems to me, in forcing us back upon our own efforts and observations. Here is a fine new variety—grand illustration and description. But the question still is and remains: Is this what I really want? The only real answer is: Try it and see. Nearly all catalog listings omit the things we simply ought to know to tell what a variety really is. They tell only the color, sometimes the height, or one other point. But we must know much more—the color, of course; the size of the flower also and its shape; the number open at one time on the spike; the height of the spike; its sturdiness or ability to stand erect in the hot sun during its tender stage; the earliness or lateness of bloom, etc., etc. Some day our catalogs will note most of these essential points. The orthodox way at present to my mind is not at all suffi-

cient. Now, when I get a new variety, I am largely in the dark whether it will prove what I want or not.

Once in a while a happy surprise results. The new acquisition goes far beyond expectation. When I planted my first *Schwaben* I did not realize what was in store for me. Up they came, fine and strong, and they grew stronger all the time. The bloom was exquisite, just what I wanted in creamy yellow. When I harvested the corms they were simply immense. And the second year these corms brought spikes fully 5 feet high, nearly all two spikes to the corm; the cormels were a riot of sturdy foliage, and many bloomed. Many a visitor I took out to see those *Schwabens*, for it was a sight good for the eyes. Their thrifty, stalwart growth was like a tonic to any dispirited mind. I had *Lily Lehmann* alongside of *Schwaben* the first year, but the 100 Lilies grew sickly, with only occasional blooms, and these inferior. Yet, when I secured *Lily Lehmann* I rather thought it would prove an excellent variety with me. So I am skeptical till I try for myself, and I let my experience serve as my ultimate guide. Then I find that I frequently differ from the old established Gladiolus doctrine.

R. C. H. LENSKI.

### REMOVING TOPS FROM GLADIOLUS CORMS AFTER DIGGING.

TO THE EDITOR:—

I noticed an item in a recent issue of your paper to the effect that it is better to cut off the tops immediately when the corms are dug, and as I had a theory of my own to the contrary, a year ago I tried both plans in the fall of 1916 and am convinced that the bulbs on which I allowed the tops to remain, cured firmer and plumper, and when planted last spring they grew far more vigorously and rapidly than those from which the tops were cut immediately on digging. My theory is that the substance in the top goes back to the root after it is dug and, therefore, should not be cut off until dry. Should like to hear from others on the subject.

JOHN A. GARDNER.

Note by the Editor—

Actual experience is better than theory and it seems that Mr. Gardner has proved to his own satisfaction that the top should be left on until the corms are cured. We cannot believe that this is right although we have seen directions given both ways. Anyway it is not practicable to leave the top on if the grower has any considerable quantity. Besides, it is altogether against the theory of capillarity to leave the tops on. Let us hear from those who have opinions on this matter, or still better from those who have tried it or who have noted the effect of both methods during years of experience.

### FORCING GLADIOLI.

Without doubt the curing of the bulbs after digging has much to do with successful forcing. The writer has forced Gladioli in a greenhouse and has observed that a sound plump well-cured bulb is pretty sure to make a spike of bloom under normal greenhouse conditions. Not having had experience in window forcing, it is with regret that no information can be suggested along this line.

Having forcing in view no doubt the conditions surrounding the storage of bulb stock before planting has much to do with later results. This duly considered, together with the variety and its vigor will, in a great degree, determine the final success of the undertaking.

With human beings it has been said that to begin right "we should choose our grandparents." It may be well to go equally far back with Gladioli, in other words, it may be possible to breed a line of Gladioli that shall possess the characteristics for successful forcing.

Again referring to the curing of Gladiolus bulbs: We know that two out of the three very essential elements in growing the Gladiolus are fresh air and sunshine. Then let us use these freely in the curing of the bulbs, especially if forcing is to be carried on. Three or four weeks after the plant has budded or bloomed, and same has been removed, the bulb should be well matured and ready to be harvested. If it is then lifted and allowed to lie on the ground before removing the top, for a few days, the bulb has well commenced its curing process, especially if the period has been one of sunshine. After this, the top may be removed and bulb stock placed in a cold dry airy place.

As the time draws near for inside planting; and by the way, a space of at least three months' time should intervene between digging and planting, it will be advantageous to gradually bring the bulbs near artificial heat.

It is the opinion of the writer that best results in forcing have been obtained from varieties which do not subdivide too freely, sending strength more to the bloom than to producing additional bulbs, although exceptions to this have been noted, as for instance the variety *Mrs. Watt* which produces a very plump bulb and forces so successfully that the sub-division usually blooms. No doubt other varieties might be mentioned with this characteristic.

Gladiolus bulbs for forcing should be at least  $1\frac{1}{4}$  inch stock.

HOMER F. CHASE.

### SIZE OF GLADIOLUS CORMS.

How large does a Gladiolus corm get to be? In THE MODERN GLADIOLUS GROWER for June, 1917, page 93, Mr. Montague Chamberlain reports a corm of *Easter Bells* measuring  $9\frac{1}{2}$  inches in circumference. I have a corm of *Golden Measure* measuring  $11\frac{1}{8}$  inches in circumference and weighing  $5\frac{1}{2}$  ounces. Next!

C. C. MILLER.

## Mrs. A. H. Austin.

MRS. AUSTIN IS ALREADY well known to our readers. Anyone who can undertake a department in a monthly publication and continue it successfully and steadily without a skip for four years as Mrs. Austin has done, does not need comment from the Editor. Her work shows for itself.

The Gladiolus trade has no more enthusiastic and active worker than Mrs. Austin. She started in the business as

partnership has been formed with Joe Coleman, and the Austins have retired to Ravenna, Ohio, where Mrs. Austin is growing seedlings and conducting test grounds.

It is as a hybridizer or originator of varieties that Mrs. Austin is best known. Her varieties which have attracted most attention and are best known to the Gladiolus trade, are *Evelyn Kirtland*, *Herada*, *Gretchen*



MRS. A. H. AUSTIN.

The flowers in the picture are some of her own seedlings.

an independent worker. Mr. Austin assisted her by humoring her "hobby," as a new undertaking would naturally be called, by preparing the soil for the growing of Gladioli. Mrs. Austin hired neighboring women to assist her in planting, weeding and cleaning the corms. She conducted the business independently until it assumed large proportions, when Mr. Austin gradually gave up his farm work and became interested in the business. Mrs. Austin, however, conducted the business in her own name for some years after it had grown to large proportions. The A. H. Austin Co., Wayland, Ohio, became one of the largest growers of Gladiolus corms in the country. Recently a

*Zang*, *Bertrex*, *Cardisun* and *Wamba*. *Evelyn Kirtland* is especially attractive and of enormous length of spike and *Herada* is very distinctive in coloring. The Austin originations are well and favorably known wherever the Gladiolus is grown.

Mrs. Austin is a charter member of the Gladiolus Society of Ohio, the American Gladiolus Society and the Ladies' Society of American Florists. She is a member of the Nomenclature Committee of the American Gladiolus Society.

Those interested in the modern feminist movement can prove by Mrs. Austin's experience, that women are able to conduct business successfully.

Mrs. Austin's writings for THE MODERN GLADIOLUS GROWER, now THE FLOWER GROWER, beginning with the very first issue, are looked forward to each month by a large number of interested readers.

### Grow Flowers.

We who love gardens have reason to be thankful. Gardening is relaxation. The refining and soothing effects of digging in a garden are the more keenly to be appreciated in war times because of the comparison such work affords to the echoes of the cannon and the strife of war. Nature's wholesome breath is like a benediction.

We who make gardening our hobby are glad of the broadened appreciation of our hobby brought about by the Government urging the people to plant gardens. We are proud, too, because of the happiness and contentment our new found co-workers have discovered in growing things. Because our brothers are "over there" is no reason why we should expect the sun to stop shining, the beauties of Nature to cease, nor the songs of birds to be stilled.

Flower gardening is just as necessary in these war times as vegetable gardening. Flowers are food for the soul, stabilizers of the emotions. More than ever do we need these things now.

God intended that flowers should give us cheer. Was there ever a time when cheerfulness was more needed than in these days when so much is happening to unsettle our thoughts? Grow flowers! Preach the gospel of beauty to all about you!

Gardening for flowers, for beauty, for naturalness, will never be listed as a non-essential in the lives of the American people. It is as necessary a feature of wholesome lives as good fresh air and sunshine.—J. J. LANE in *Florists' Exchange*.

### Two Gladiolus Freaks.

A. E. Kunderd, Goshen, Ind., sends us in the same box two interesting Gladiolus freaks. One of these is a twin bulb. This is not simply two divisions from the old bulb, but real Siamese twins actually grown together where they join the old corm and on a space about  $\frac{1}{4}$  x 1 in. The diameter of the corm is about 2 inches.

The other freak is even more interesting and we do not know how it occurred. Anyway, it consists of four Gladiolus corms with as many stalks. One of these stalks has grown right up through the old corm on which has formed the other three new corms. The only way we can account for this is that a small corm was planted directly under a large one, but even then we do not see how it could be that a sprout grew right through the old corm. There is no doubt but what it did.

Mr. Kunderd simply sends the freaks without comment so we have no suggestions from him as to their cause or reason for existence.

It is presumed that Gladiolus enthusiasts have their stock all cleaned and sorted ready for planting and that they know just exactly where each variety is going when Jack Frost finally loosens his grip on the soil. System in planting will save errors and make the work more interesting.

## A Roseless Garden.

[Continued from page 15.]

should I, when I can have *Ida Van* or *Mrs. Watt* for fifteen cents or less?

"By the middle of June some of the more floriferous dahlias will begin blooming and will continue until the first killing frost of November or late October. But the smiting suns of summer will take the vividness from their colors and will dwarf them in size. But when September and October shall come with their days of softest sunshine, with their nights so enchanting, that you fear to go to bed lest you miss the fitting of some new moth, lest you lose some notes in the concert of perfume that a thousand flowers are breathing forth to their lords, the stars, then, O, then, you should see the dahlias!

"The *Kalif* with his gonfalon of crimson, *Minnie Burgale*, most glorious of dark Reds, *Margarite Bouchon*, with blooms that seem water lilies floating, not on silver waves, but in seas of gold light, the *Grand Manitou* with flowers so huge and bizarre you can hardly believe they have not been made by the hands of some intoxicated artist of China or Japan, and last, but by no means least the old-fashioned but indispensable *A. D. Livonii* with blooms so numerous you weary before you have finished counting them, all shall be there.

"In July and August the Auratum and Lancifolium Lilies, the *Hermocalis* and *Funkias* must furnish the color, while the tube roses, especially that Mexican single tuberosa, must furnish the perfume. By the end of August and during the first part of September *Nerine Sarniensis* will suddenly leap from the ground without a single leaflet and lift a parasol of scarlet silk while the pale pink of the *Belladonna* *Amaryllis* nearby will tone down the intensity of its companion.

"Of course, I shall have annuals—lots of them—but few varieties. I prefer the old, tried kinds. There shall be great bonfires of *Salvia Splendens* against which break the white foam of sweet alyssum in a vain but perpetual endeavor to extinguish their flames. Clumps of poppies shall send their soporific scents through the airs of early summer and when they have ceased blooming will be pulled up to make place for zinnias which have already been started in paper pots, or may be the crimson of the poppies will be followed *vinca oculata* with blooms of milk splashed with a single drop of claret wine. I shall have patches of pansies and to soften them down there will nearby be nests of lobelias with azure petals that look like bits of fallen sky. But above all and before all there will be petunias. Where is the annual that can compare with them? Easy to germinate, growing in almost any soil and blooming as if the soil and the air were an inexhaustible source of beauty and fragrance, they shall hold the place of honor in my garden as they hold it in my heart. In the more formal parts of the garden there will be Chinese wool

flowers which, strange to say, live up to their catalogue reputation. I can not get along without some vines, two mainly, *Ipomaea Coeluha* *Coclestis* and *Cardinal Climber*. I will also have *Antigonum Leptopus* and *Clematis Paniculata*. But first and foremost the *ipomaea*. All day long on the cooler, cloudier days they shall display their bowls of blue and each vine I know will daily furnish five hundred flowers. The *Cardinal Climber* will do almost as well with its myriad crimson stars.

"Such, my friend, is the roseless garden I shall have on my new lot. The beauty of it is, that you can have all these flowers the *first* year. All except the peonies. No anxious waiting for the slow establishment of the plant as with roses, shrubs and many perennials."

"It will cost me something to raise such a garden," you say.

"To be sure. But it also costs something to get drunk and to drive automobiles. And you do not get for nothing base ball games, theatre tickets and church sociables. But, listen, this is the way to get flowers: Stay away from a play you were going to see and you can buy you a hundred Gladioli, *America*; stay away from two and you can get *Madame Mounet Sully*. Cut out moving picture shows for a month and you can buy you a bushel of cormlets guaranteed to be man-sized corms in a year or two and sufficient in quantity to plant an acre of ground. Think of it, Beau, a whole acre of Gladioli! Who would not abstain from moving pictures for even a year to be the proud possessor of an acre of Gladioli? I could manage the corms, all right, but it is getting the acre of land in this town which gives me pause.

"No; such glory is not for yours truly."

## Catalogues and Price Lists.

J. D. Long, Boulder, Colo.—Seed catalogue and garden guide which Mr. Long calls "decidedly different." It really is different and it contains a lot of valuable information—34 pages and cover. Gladioli are given the place of honor among the flowers.

S. E. Spencer, Woburn, Mass.—Wholesale price list of Gladioli for 1918.

Fred W. Baumgras, 423 Pearl St., Lansing, Mich.—Retail price list of the popular varieties of Gladioli with directions for culture and care.

A. P. Bonvallet & Co., Wichert, Ill.—Retail list of Gladioli with illustrations. Eight pages with colored cover.

Homer F. Chase, Wilton, N. H.—Eight page retail catalogue of Gladioli with colored illustration of the variety *Mrs. Watt* of which Mr. Chase makes a specialty.

C. W. Brown & Son, Ashland, Mass.—1918 retail catalogue of Gladioli, 12 pages. The Brown novelties, *Mongolian*, *Mrs. O. W. Halladay* and *A. W. Clifford* are especially featured.

M. F. Wright & Daughter, 1332 Eckart St., Fort Wayne, Ind.—Eight page retail catalogue of Gladioli with especially good descriptions. The *Kunderd* varieties are especially numerous in the list.

Geo. J. Joerg, New Hyde Park, L. I., N. Y.—Wholesale price list of Gladioli for 1918.

Ralph E. Huntington, Painesville, Ohio.—Fifty-two page illustrated catalogue of *Assters*, Gladioli, Roses, Peonies, hardy perennials, etc., finely printed and with colored cover and extra good descriptions.

Richard Diener Co., Kentfield, California.—Finely printed catalogue of the William Diener specialties, 22 pages and colored cover. The Diener originations of Gladioli are especially well described and illustrated. Four beautiful colored illustrations of *Petunias* are contained in the catalogue and altogether the catalogue is an unusual one and should be in the library of every flower lover.

Munsell & Harvey, Ashtabula, Ohio.—Special list of 1" to 1½" *Gladiolus* corms. Many of the best known commercial sorts.

## Age and Gladiolus Corms.

[Continued from page 13.]

are not without instances of forms which rarely produce more than one crop of flowers on the same branch. The grapes, raspberries, blackberries and others come to mind in this connection.

Now, in which class is the *Gladiolus*? Nobody knows. To definitely settle the matter, some of our *Gladiolus* enthusiasts should take, say, a dozen corms of some form that has flowered only once and an equal number of corms from the same form and let the plants settle it by growing them side by side under exactly similar conditions. Each successive season, the best of the old corms in the first group should be planted, and the same number of the best corms from the second group, taking care not to use any that had flowered once. Probably a very short time would tell whether the old corms really deteriorate. If the new corms produced from corms are more floriferous, the sooner this is known the better, for it would have an important effect on the sale of such stock. At present, it is the custom of the amateur gardener to save the old corms for blooming and the corms are usually thrown away. Though one line of experiments would be fairly convincing, a number of trials would be much better. A careful record of such work would be a valuable contribution to science.

Note by the Editor—

Next month we will have a short article on the same subject and our correspondent takes the position, contrary to accepted usage, that *Gladiolus* corms do not grow old. We wish that we could believe this and evidence on both sides of the case will surely be interesting to all growers. If *Gladiolus* corms do not grow old as has been thought, it will surely be interesting and valuable information to those who make a business of growing *Gladiolus* corms for market.

The New Amsterdam sailed from Holland on January 25th and was expected to arrive in New York soon after the first of February. A large quantity of Holland grown *Gladiolus* corms makes up part of the cargo. K. Velthuys, Hillegom, Holland, is reported to have over one and one-half million in the shipment.

## The Future of Flower Gardening in America.

(Continued from page 19.)

for the services of the professional flower gardener. And as this desire for the beautiful grows greater, the number of flower gardens throughout the country will increase until the supply meets the demand. But that will be a long distance in the future, and I even question if the supply will ever equal the demand, for there must always be more people who would like to have flower gardens around their homes than there are those who actually have them. Who was it that said, "Every Garden Means a Home?" I might go further and say, "Surely every Flower Garden means a happy home."

Nine or ten years ago I first went to Europe to inspect seed crops with my father. We traveled through England, Scotland, Ireland, Holland, France and Germany and got out into the rural districts of each country. I was greatly impressed that in every little town the homes were surrounded, not by the lawns that one finds in America, but wherever space permitted there was a flower garden. Rambler Roses, Wisteria, or other climbers were to be found over the doorways, and on the small plots of ground on either side of the little path leading to the house were old familiar flowers. It is needless to say that this warmth and beauty about the homes has added much to the happiness and contentment of the national life.

In America, and all new countries, we have been so busy developing our national resources and material wealth that we have neglected some of these finer things that we are now learning more to appreciate. Flower Gardening in America has not yet reached its normal level. The people of America are just beginning to awaken to the advantages and charm of the flower garden. So in the future we can expect to see far greater progress made in flower gardening in America than in any European country.

Because of special conditions existing today flower gardening has received a severe shock. But the desire for flowers persists perhaps even more strongly than ever before. It is actual necessity that prevents many people today from surrounding their homes with the uplifting influence of flowers. Never was there such need in the world for the influence of the delicate beauty which is produced only in the flower garden. We who have made gardening our life work should now do all we can to gladden the hearts of the sick. Yes, because of the waste of war actual flower gardening has suffered—but when peace comes and the pendulum again swings the other way, flower gardening will find that it has even a greater place in the sun—Flower Gardening in America has indeed a glorious future.

Don't miss the attractive collections of Gladioli offered at low prices in this issue. They contain bargains.

## Vegetable Gardening.

It will be noted that our advertisers who sell flowers as a commercial enterprise are many of them offering garden seeds and vegetable plants. This is commendable and surely everyone is interested in vegetables during war time. It is our hope next month to

### CLASSIFIED ADVERTISING.

Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.

**GLADIOLI**, No. 2 and planting sizes America, Mrs. Francis King, Niagara, Panama, Pink Beauty, Independence, Sulphur Queen, Princepine and Pendleton. War, ½ inch and under, \$1.25 per hundred; ½ in. to ¾ in., \$2.50 per hundred. Peace, ½ in. and under, 70c. per hundred; ½ inch to ¾ inch, \$1.40 per hundred. Postpaid at these prices. Write for wholesale quotations.

JOHN B. HUMPHREY, Logan, Ohio, R. D. No. 3.

**PRIMULUS HYBRIDS**—60c. per dozen, \$4.00 per hundred, prepaid East of the Mississippi River; 6 at dozen rate; 25 or 50 at hundred rate. These are a fine strain and a few should be in every garden.

GLADSHEIM GARDENS, Southport, Conn.

**GLADIOLUS PRINCE OF WALES**. Here is a chance to secure an extra good variety. I have several thousand small size Prince of Wales (¾ inch and less) which I will sell or exchange for any meritorious variety. What have you to offer? Also have Panama and Niagara, same size. JOHN ZEESTRATEN, Mansfield, Mass.

Interesting catalogue, free to all Iris lovers. H. W. GROSCHNER, Specialist Grower of fine Iris, Napoleon, Ohio.

ALL the leading varieties of Gladioli and many newer ones, are offered in my new descriptive wholesale list, sent free. RAY P. SELOVER, Lakeside, R. D. No. 9, Auburn, N.Y.

**METZNER FLORAL CO.**, Mountain View, Cal., offer a special lot of choice Gladiolus bulbs, well assorted, in lots of 100; large bulbs, \$3.00; medium, \$2.50; small, \$2.00. Prepaid. A bargain.

**FOR SALE**—Gladiolus in mixture. Large, clean bulbs, 25c. per dozen; \$1.30 per hundred, postpaid anywhere in the 3rd zone. Will enclose one or more named varieties in each order. R. E. BOOMHOWER, Greenville, N.Y.

**GLADIOLUS CATALOG FREE**—Describes Praecox Hybrids, and other splendid varieties. Special offers in collections. Liberty Mixture, \$1.25 per 100; Groff's Hybrids, \$1.50 per 100; express collect. Single bulbs, postpaid: Rouge Torch, 20c.; Schwaben, 15c.; Mrs. Pendleton, 10c. HOWARD GILLET, Box F, Lebanon Springs, N.Y.

**GLADIOLUS**—20 varieties, all different, \$1.00: 25 finest mixed, not labeled, \$1.00; 100 for \$3.50; young, vigorous, blooming sized corms, not old, wornout stock; also, hard-shelled cormels from our finest mixed strain, 25c. per hundred in any quantity; all postpaid. J. H. TILTON, P. O. Box 48, Salem, N.H.

**TITANIC** and many other new, beautiful Gladioli, all our own originations. Send for illustrated catalog. DECORAH GLADIOLUS GARDENS, Decorah, Ia.

**IRRIGATION** Grown Blooming Size Planting Stock and Bulblets of America, Mrs. Francis King, Twentieth Century, Giant Pink, Panama, Pendleton. Write for Special February Prices.

E. M. HOYT, Arvada, Colorado.

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**SURPLUS GLADIOLUS CORMS**—Golden King, Jean, Panama, Wm. Mason, America, by the hundred. Mary Fennell, Europa, Niagara, Mrs. Pendleton, Peace, Mrs. King, Mrs. Watt, by the dozen. All large and good exhibition varieties. A good mixture 75c. a hundred. Write E. M. WILSON, 380 May Street, Worcester, Mass.

**BIG OFFER**—To get acquainted—100 blooming size Gladioli for \$2.00 prepaid. This is the biggest offer ever made, as the mixture consists of the following named varieties and they will all be labeled: Europa, Peace, Pendleton, K. Glory, C. White, America, Schwaben, Halley, Baron Hulot, Princes, F. King, Primulinus Hybrids, Willie Wigman, Snow King, Charmer, Fascinator, etc. Only one of these assortments to a person. F. M. PALMITER, Janesville, Wis.

print an article describing what one man actually did with a war garden last year. This man was not an amateur but an experienced grower and he gives his results in dollars and cents after allowing for labor, etc. All flower growers necessarily have vegetable gardens as the two naturally go together.

## deGroat & Stewart

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We specialize in the choice American and French varieties. Catalogue on request.

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J. D. LONG, Boulder, Colo.



# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 3

March  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

### Our Garden in Winter.

BY MRS. GERTRUDE ELLIS SKINNER.

[Written expressly for *The Flower Grower*.]

There are gardens below,  
Under the snow;  
Crocus, Tulips in gay little row  
Hyacinths, Daffodils, Scillas a blow—  
Motley, merry and eager to show  
Under the snow.  
Pansy beds out where the high drifts have blown  
Daisies are there where icicles are shown  
Lilies of splendor—glory of rose  
Out where a garden of snow flowers grow  
Under the snow.

OUR GARDEN in winter is a place of rest, a place of beauty and a place of wonder. It is the most restful place we know of. It's sound asleep and nothing but dynamite can break the bed in which it slumbers. It is resting to the depth of eight feet. (This is merely an estimate for being a somnambulist ourself we are not going about in January to disturb the sleep of nature.) The tools with which we fret the plants and harrow the ground in summer are resting and we have a restful feeling in seeing them at rest. We know that in six weeks' time they will give us a restless feeling but we feel in tune with nature just now.

Down in that adamantine earth are slumbering the bulbs that will give us a great joy in the spring time—for the catalogues have promised us that joy. There are the crocuses that will bloom like the flowers of the fields of Ardath; there are Daffodils that will turn our beds into ribbons of greater auriferous splendor than the famed Field of the Cloth of Gold, and Darwin Tulips with bowls as pure as that of the Holy Grail. Down in that frost riven ground are seeds of the Hollyhock, the Phlox and the Columbine. Nature has sown them with a prodigal hand. Nature is always at the job of sowing. Her seeding time seems never over. Even in January we see the tumble weed or the Russian thistle hurtling along on top of the snow crust, scattering its seed as it travels. Late in February we see the birch tree seed on the ermine covering

in the woods. In sunny days in March the hard cones of some of the pines

of the "pusley," smart weed, rag weed and all those other weeds that go to make up so much of Gray's Botany. Perhaps they are not all there, but when we were hoeing last August we recall seeing most of them. It is a strange thing about our garden. For twenty years we have hoed out every weed and there were just as many there at the last hoeing in September as there were two decades ago. That ground seems to just create weed seeds. But there are other things sleeping there besides seeds. There are cut worms that are dreaming of having on their spring breakfast table, plants that will cost us fifteen cents each. Then there are the lice that will hold as many conventions as there are roots to the Asters; there are ants that will sport on the Peony blooms, running in and out as though we raised the flowers for their benefit; the wild cucumber bug that eats the bloom of the Gladiolus; the Rose beetle and as many other varieties as we will have plants. There will be bugs for every plant except the weeds. O for a weed eating bug! One that will be a cross between the fire fly and the Aster beetle so it can eat at night as well as day. \* \* \* \* Seeds, roots and bugs and worms are all down there in our garden awaiting the trumpet that shall sound the resurrection of nature.

But the mystery of it all. The life that is there in that seeming death. The big, juicy bulbs of the Lilies enfolding marvelous beauty and perfume; the seed, the embryo of root, stem, leaf, flower and seed. The whole gamut of life in a microscopic case. Man takes a seed and he studies it under his microscope. He analyzes it and finds it is of the elements of the earth. He seeks for the mysterious spark called life and confronts the In-

[Concluded on page 36.]



GLADIOLUS—MRS. O. W. HALLADAY.

[For description see page 26.]

pop open and shoot their tiny seed into the yet wintry air. Down in the earth of our garden, nature has planted seeds

## THE DAHLIA.

### Preparation and Cultivation of the Soil.

BY J. K. ALEXANDER.

[Written expressly for *The Flower Grower*.]

Preparation and cultivation of the soil are two very necessary and at the same time simple operations; and perhaps that very simplicity is responsible for the fact that in by far the majority of cases neither one is performed thoroughly. But however simple they may appear, for the best results with Dahlias those two things *must* be done; it is absolutely necessary. This necessity I want to drive home.

Just why it is that the average amateur grower fails to realize the importance of a thorough preparation and cultivation of the seed-bed, I fail to make out. It surely cannot be through ignorance; if he picks up a seed catalog of any description, if he reads the most elementary instructions for the planting and raising of anything under the sun, even if he does nothing but buy a package of seed, the essential information stares him in the face. The most superficial search will yield ample information as to just what should be done. And yet, year after year, all these instructions and advice apparently fail to make a dent. Thousands of flower growers still continue a careless and haphazard method of planting and growing that, while it displays a pleasing and touching optimism, will never obtain first class results. Careless methods never have succeeded and they never will succeed.

So far as the actual work is concerned I fully realize that there is little to be said that has not already been said a thousand times. Nevertheless good advice remains new and right up-to-date until it has been followed.

If the piece of ground selected for your Dahlias needs humus it must be supplied. What is humus? The best definition I have heard is that humus is any material that has once been alive, vegetable or animal. This includes a wide range of material for application and no excuse of inability to obtain it can be allowed; even a crop of weeds spaded in will supply humus, and in many cases is readily available.

Undoubtedly the best material for the purpose is stable manure, and it should be applied in the fall and turned in to allow time for rotting and disintegration. Ground that lacks humus is readily discerned by its showing a tendency to cake up when turned; it falls from the spade or plow in hard lumps. Soil in this condition is no place for Dahlia bulbs.

In the spring before planting the soil should be thoroughly worked over; and I mean by that exactly what I say. It does not fill the bill to make a few passes with a garden rake on the top two or three inches and then dig a hole with a spade and drop the root in—

at all. The ground to a depth of about ten inches should be pulverized to the consistency of fine meal. Of course this takes time, time and patience, but if it is realized that this is to be the bed of the Dahlia bulb for the next three months and that this is the only opportunity to get into the proper condition the soil about the roots, an extra half hour or so spent in making the bed reasonably habitable will not be grudged.

This preparation is essential for the reason that the tiny, thread-like rootlets which spring out from the bulb must have conditions of such a nature that food and moisture can easily and quickly be assimilated. The first requirement is that every point upon their tiny surfaces should be in direct contact with the soil, and the only way in which this contact can be established and maintained is to have the soil mellow and of the finest consistency. The more thoroughly this is done, the more food will be taken in by the growing plant with the consequent result of rapid, strong growth.

Even more important, if possible, than the preparation is the cultivation while the plant is growing. Keep the top layer of earth about the plant in a high state of cultivation, stirring the soil constantly to a depth of two inches and a diameter of five or six feet; this distance being necessary as certain varieties of Dahlias throw out long, slender root-runners sometimes to the distance of several feet.

Never allow the top earth to form a crust for if this happens immediate loss of moisture is the result. A good illustration of this fact can be seen if, immediately after mulching a piece of ground, a person walks across it. In a remarkably short space of time the earth will be perfectly dry with the exception of the spots where he has planted his feet, the foot prints will remain damp and moist. Evaporation everywhere else has stopped but the pressed down earth of the footprints continues to allow moisture to come up from below and escape by evaporation.

There is another important reason why constant mulching is beneficial. Every foot of ground contains quantities of unavailable plant food and every stirring of the ground releases for the use of the plant a certain portion of this food, makes it available for use. I do not know the precise quantities thus released, but I do know from actual experience that a constant and thorough cultivation will materially reduce my fertilizer bill.

This entire subject of preparation and cultivation is highly important and the results of proper and improper care cannot be overestimated. The amateur must remember that the Dahlia below the ground is a constantly expanding group of bulbs and in consequence the seed-bed must be mellow and well worked to allow for this ex-

pansion. He must bear in mind that the Dahlia contains an exceptionally high percentage of water and, as artificial watering should be avoided except in time of extreme drought, every drop of moisture must be conserved by a constant, energetic and intelligent cultivation.

### Grafting Dahlias.

Take a Dahlia tuber the size of one's finger, dormant or with growing roots and split the top end one inch down. Then take a sprout two to four inches long, trim off the lower leaves, cut the base wedge shaped, being careful to leave a bud near the base, and insert in the split root, tying the splices to hold the union and pod. Or if the season is advanced enough plant in the open ground. The plants will grow off, sometimes without wilting, making a fine blooming plant much quicker than a cutting and much more certain to grow.

It is important to have an eye or bud near the base of the scion, as otherwise the plant may make a good growth and fine clump without any bud at the base and, of course, no plant the following year.

I have grafted tomatoes on potato roots and got a crop of tomatoes but never a potato. E.

### Gladiolus—Mrs. O. W. Halladay.

[Subject of illustration on front cover page.]

This variety was originated by A. E. Kunderd and the stock was bought in 1913 by C. W. Brown & Son. It was awarded first prize at the Connecticut State Fair in the fall of 1914 as the best undisseeded variety and was introduced by the above firm in 1915.

The color is a delicate rose pink and the throat is heavily marked with a soft clear yellow. The color resembles a well ripened Crawford peach.

The foliage is long, slender, slightly curved and of a bright green that sets off the flowers to good advantage.

The flowers are of a good size and well placed on the stalk with six to eight open at a time in the field while in water ten or more will open at once.

The plants are strong and vigorous and seldom have crooked spikes.

Cormels are produced freely and nearly all grow.

The flowers ship well and are in strong demand by florists.

Collections of especially meritorious varieties of Gladioli as offered by the various advertisers in this issue we highly commend to those who desire to increase their varieties and become acquainted with some of the best new sorts. Collections are usually offered at a special rate and the amateur can secure bargains by ordering them.

When the war is over those people who have neglected their flower gardens will wonder why they did it. This war is not going to last long, and anyway the need of flowers will be greater and greater the longer it lasts.

## Water Lilies for Profit.

[Written expressly for The Flower Grower.]

MRS. AUSTIN in her "Talks" in the July, 1916, issue of THE MODERN GLADIOLUS GROWER told us about "Lily Bill" and his enterprise in transforming a "Swale Through the Meadow" into a beautiful ornament to the landscape and incidentally into a

edged steel instrument as shown in the illustration. This is attached to the end of a cane pole 15 to 18 ft. long. The crook is hooked onto the stem just below the bud, slid down the stem 15 or 20 inches and a quick wrist movement cuts the stem. By hooking onto the bud it may be swung to the shore.



Nearby View of one of Mr. Clark's Ponds.

financial success for "Lily Bill." There are possibilities along this line for many locations which are otherwise of little or no value from a horticultural standpoint.

Mr. Clark states that he can cut 250 to 300 in one hour if the wind is not blowing, but that a beginner is likely to make awkward work of it at first. Mr. Clark wears hip boots, but states that



Baskets of Water Lilies as they are brought from the Pond.

We are indebted to Mr. F. P. Clark, of Ohio, for some practical information on the growing of Water Lilies which will be helpful to those who are interested in the subject from the standpoint of growing for market and the illustrations here shown are from photographs made by Mr. Clark.

Water Lilies, according to Mr. Clark, do best in 18 to 20 inches of water although he states that his ponds are about two to three feet deep. The Egyptian Lotus, which is shown in one of the illustrations, does best in only 10 inches or a foot of water, but the soil or mud should be about two feet deep.

For harvesting, Mr. Clark uses an

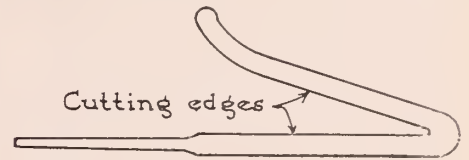


Egyptian Lotus in Mr. Clark's Ponds.

if his ponds were deeper he would prefer a submerged walk in place of a boat, owing to difficulty of getting the boat into position.

After cutting, the stems and sepals are washed clean of the sediment that collects on them when growing, and carried to a cool cellar and spread out on a layer of damp sphagnum moss where they remain until evening. Then they are packed in baskets with damp moss. Early in the morning they are shipped to the florists or commission houses and they will open up as bright as if just cut.

Mr. Clark says that Water Lilies are



Steel Cutting Tool to be attached to a Cane Pole.

easy to grow and bring a fair price and that he grows several varieties of pink and white. Visitors are attracted more to the water gardens, he says, than even to his half acre of the finest named Gladioli.

We expect to print future articles on the subject of Water Lilies and if those who have had experience will write us with suggestions of a practical nature, we will be glad to use such information.

### Forcing Gladioli for Florists.

Gladioli wanted for a Memorial day crop should be planted in benches now. It should be remembered that pinks and reds sell much better than whites at that season. Perhaps you want some Gladioli to come along in good season outdoors, but have not facilities for benching these in your greenhouses. In such cases it will pay to start a few dozens or hundreds, according to your needs, in 3 inch pots. Either earthenware or paper pots may be used. If you cannot spare greenhouse space, they will do well in a gentle hot-bed. A foot of fresh manure, well tramped, a layer of fine coal ashes over this, just sufficiently deep to half plunge the pots, will give them an ideal start. They can be gradually hardened and planted outdoors early in May. They will flower two or three weeks ahead of the outdoor-planted dormant corms. —*Florists' Review.*

Next month we are printing an editorial by a valued correspondent suggesting how he was able to turn his crop of cut flowers to the benefit of the Red Cross. Consider the idea. If you have a surplus of cut flowers during the coming summer, try and work out a plan whereby they can be sold for the benefit of the Red Cross. We solicit suggestions along this line.

A. E. Kunderd, Goshen, Ind., sends us another Gladiolus freak. It consists of four hard shell bulblets grown together. While double bulblets are common, yet the quadruple bulblet is a very uncommon freak and it is not likely that this will be duplicated for some time to come.

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

### A Birdman and His Birds.

YES, HE IS A BIRDMAN, but not a German bomb-dropper, and not an American soarer above the clouds qualifying for aerial battles "over there." His son has gone to "look after" the Kaiser, and he is doing his bit here at home in numerous ways and incidentally proving through his hobby—the study of birds—that they are also accomplishing a part by helping to conserve food. For years he has furnished homes and winter food for his pets and they have repaid him by summer feasting on destructive insects and their larvæ that would have ruined his vegetables and fruit. He tells us that in early winter the birds seemed instinctively aware of the rigorous winter weather to come and many migrated four days before the first severe cold snap, and not for years has he had so few with him during the winter season.

His feeding house, somewhat crude but very serviceable, measures 14 in. wide by 24 in. length and is hung on a wire stretched from the house to a tree, a distance of about 30 feet and can be easily drawn to the porch to be replenished. It is not an uncommon sight to see half a dozen Chickadees sit in a row on the lower part and have a trolley ride in. They seem to enjoy it and twitter happily. When the weather is extremely cold the birds gather fearlessly in the porch and feed on the shelf seen there. Chickadees, Nuthatch, Tufted Titmouse and Woodpeckers have been with him even through the coldest weather and recently reinforced by Cardinals, various Woodpeckers, Robins and Bluejays. The "Birdman" keeps his food table well stocked with watermelon, pumpkin, muskmelon, squash and in fact almost any kind of seed, and although they eat of them all, it is plain to be seen that they have their individual preferences. The Titmouse and Nuthatch will select seed of pumpkin or squash, sunflower and nutmeats. The brilliant Cardinal chooses kaffir corn while the Woodpecker will make a meal of suet and nutmeats. Right here let me add that such food should be supplemented by the fruits from berried shrubs and when planting shrubs for ornamental purposes give the birds a thought and select some of the berried ones which are also very ornamental.

Many and various are the nests made for his birds, but the short log with bark left on, fashioned for different needs, seems to be a favorite. The forests have been cut away and every hole in "The Old Apple Tree" filled with cement so that Mr. Flicker, Bluebird, Wren or Woodpecker have no place to nest. More and more are we learning the value of birds to save our crops, but to keep them we must fur-



nish them summer nesting places. If you have winter birds you will surely have summer birds. Many are the lessons to be learned from them. Was it from the demure Quail which appears and disappears at ones very feet that the great war artists learned the art of camouflage? The wonder-

ful heavier-than-air machine ascends into the heavens in perfect imitation of the American Eagle. And what about the scolding house-wife who, for some trifling reason refuses to allow her husband to enter her spic and span kitchen? Surely she patterned after Mrs. Wren who meets her liege lord and master at the door, accepts his hard earned family provision, a regular stream of green worms, without allowing him to enter.

Our Birdman is also fond of animals and dates his interest in them to his boyhood days when he studied their



MR. C. Z. LOOMIS,

The Birdman referred to in Mrs. Austin's article. Note the traveling bird feeding house.

ways and learned their habits while hunting. He learned to love them and there are few kinds in this vicinity that he has not, at some time, had for pets. One of the hardest to tame was the—now nearly extinct—flying squirrel, a blackeyed beauty whose wings(?) of expansive skin on each side extending from the tip of the front to the hind foot, give him the appearance of wearing a blanket-like parachute as he gracefully sails in long leaps from tree to tree, perhaps resting on the dead one that is his favorite home, where he Hooverizes on Wild Potato.

In reminiscent remembrance of boyhood tramps through the woods with his father, a white-haired Deacon of the good old strict type, he recalled a legend of the early times, which runs

that: When God made a beautiful tree, plant or shrub, the Devil tried to imitate him and failed. As an example, God made the grand old Whitewood and the Devil made the Pepperidge, useless for either lumber or wood as it cannot be split. God made the beautiful Blue Beech and its imitation is the Devil's Beech, a knurly, twisted scrub of a tree, practically worthless. The graceful clinging Five-leaved Ivy has its imitation in the Poison Ivy, and if you poison easily you are sure to think His Majesty, Mephistopheles, had a hand in originating it. The beautiful Elderberry also has its imitation in the still more beautiful Poison Alder with its white flowers and highly colored foliage but worthless berries. The Sumac has the Poison Sumac. There are also many other imitations or similarities.

Truly Providence has given us a goodly heritage in the beautiful plant and animal life of field and forest.

MRS. A. H. AUSTIN.

### A Suggestion for Advertisers.

TO THE EDITOR:—

When your magazine arrives, I usually look through the advertisements first, and I find on the average that I learn as much from them as I do from the rest of the contents. However, for the possible benefit of advertisers and to learn what other readers think, I wish to tell how different classes of advertisements impress me:

While going through the February number I first selected those which made at least some quotation, even if it were one variety only. Those which merely said, "Catalogue mailed on request," or briefly stated that So-and-So were growers of Gladioli did not receive any consideration. Those which called me back again and again were those which gave a more or less extensive list of varieties with quotations. Evidently the dollar sign is what attracts the eye. "Where can I get the most for my money?"

An illustration of flowers has almost no value to me. If it is some mechanical contrivance, that is different, but a half-tone can give no idea of the appearance of the Gladiolus. The best illustration is bloom from some neighbor's garden.

R. E. BOOMHOWER.

Note by the Editor—

Mr. Boomhower's suggestions are valuable to those preparing copy for advertisements. We believe strongly in quoting prices and concentrating on something definite rather than having it in general terms. We do not, however, agree with the suggestion that illustration has little value. The illustration, while it cannot give the coloring of the flower, yet it will show the form and habit of growth and with a good color description the experienced grower can form a very fair idea of the appearance of the flower.

Those who prognosticate an early spring may be mistaken. There is more frost in the ground this winter than there has been before in years. Surely spring will not be with us until the frost is all out of the ground.

## American Gladiolus Society Launches Big Spring Drive.

Aggressive Methods Adopted by National Society to Broaden Appreciation for the Gladiolus.

ON FEBRUARY FIRST The American Gladiolus Society at the direction of its President, Mr. A. E. Kunderd, Goshen, Indiana, launched a five months' campaign for membership. The present increase in garden interest manifesting itself throughout the country as a result of the nation's call for food production to tillers of the soil, increased the number of amateur gardeners in this country over 600%. The next step in our gardening enthusiasm will be the taking up of "Flower Growing as a Hobby and Relaxation from the Stress of War."



JOSEPH J. LANE,

Chairman Membership Committee  
American Gladiolus Society.

The American Gladiolus Society has long been active in fostering intelligent garden activity under proper lines, and this campaign will be not alone a membership campaign in the sense of having for its sole object the increase of members, but will as well undertake the fostering of increased Gladiolus growing on the part of the American public.

The campaign will be in able hands. The services of Joseph J. Lane, of *Garden Magazine* and *Country Life* have been secured, and he will lead the Membership Committee in their activity. Mr. Lane is known throughout the country among garden lovers through his connection with *The Garden Magazine*, and his active association with a number of horticultural societies and floral bodies. He was one of the founders of The American Dahlia Society, and its first Secretary. His aggressive methods in the early days of this organization did much to establish it on a solid footing on which it exists today. He secured over three hundred members in the first three months of the organization's existence.

A committee is being appointed comprising a large number of the leading Gladiolus dealers throughout the country, and all interested are invited

to get in touch with the Chairman, or write to President Kunderd. Detail plans will be promulgated through bulletins issued from time to time, and results of the campaign announced as it progresses.

The Executive Committee have authorized the waiving of the membership fee for the period of the campaign which is until June 1st. Anybody joining in that time need not pay the initiation fee, but simply the annual dues of \$2.00 per year.

Arrangements have been made with Madison Cooper, of Calcium, N. Y., who is Treasurer of the Society, to mail his paper, THE FLOWER GROWER to all members during the life of their membership. This publication, formerly *The Modern Gladiolus Grower*, has been enlarged in size, and broadened in contents so as to become extremely valuable to every flower lover, particularly to those who are interested in the culture of the Gladiolus.

Professor A. C. Beal, of Cornell University, is Secretary of the Society, and is undertaking to carry on an extensive drive for members from his office, and has already produced a splendid increase.

President Kunderd wishes it to be understood that he believes this year to be a most logical one for intensifying the work of all floral societies, because of the conditions facing our country at the present time. Flower lovers are people of sentiment as well as action. Those who remain at home will need to continue their flower gardening as well as increase their vegetable and food stuff plantings for the poise that the occupation will bring to them.

One of our correspondents offers the suggestion that diseased Gladiolus corms planted rather deeply are more likely to produce healthy stock than if planted shallow and explains this by suggesting that the disease producing germs or spores are washed further down in the soil and cultivation is less likely to throw contaminated ground around and next to the new corms. It might be that deep planting is best for diseased stock; but if so, is it not more likely that it is because at a greater depth a cleaner soil which is more free from disease germs is to be found?

At one of the flower shows last year we noticed some confusion between the varieties *Elizabeth Kurtz* and *Glory of Holland*. It is quite apparent that *Glory of Holland* has been sold for *Elizabeth Kurtz* and possibly the reverse is also true and *Elizabeth Kurtz* has been sold for *Glory of Holland*. Anyway we have grown *Elizabeth Kurtz* secured from a reputable grower which seems identical with *Glory of Holland* received from another grower.

## THE IRIS.

[Written expressly for *The Flower Grower*.]

### CROWN ROT.

Many have the mistaken idea that Iris require a moist location. German Iris require just the opposite, and a dry, sunny location suits them best. Their fleshy roots store up moisture so that they are capable of enduring the most severe drouth without injury.

Some varieties of Iris (German) which have fine flowers are so subject to crown rot that it is almost impossible to grow them successfully. Manure is the principle cause of this trouble, and I learned this by experience. One winter we had severe weather without snow to protect them, and I mulched part of them with strawy manure. The following spring over one-half of those I mulched died.

I have hoped to succeed with some of the varieties that are subject to this rot, and have planted them in the best locations in my nursery, but wherever planted they have been a failure.

One writer advances the theory that too deep planting is the cause of this trouble. If deep planting was the cause it should affect all varieties alike—yet many varieties are not subject to this rot.

There may be another name for it, but I call it crown rot. The plant rots at the crown, and the tops drop off the roots. The whole plant is seldom affected, and it does not kill them outright.

The German, Dwarf Bearded and Intermediate are the only Iris that I have ever noticed that were affected with this rot.

### VARIETIES RECOMMENDED.

German Iris which are dependable and inexpensive: *Aurea*, *Celeste*, *Comte De St. Clair*, *Fairy*, *Florentina*, *Gertrude*, *Her Majesty*, *Honorabilus*, *John De Witt*, *Madam Chereau*, *Melvina*, *Mrs. H. Darwin*, *Parisensis*, *Perfection*, *Queen of Gypsies*, *Thyspe*, *Ulysee* and *Velveteen*.

Newer varieties of German Iris: *Alcazar*, *Black Knight*, *Caterina*, *E. Michel*, *Eldorado*, *Isoline*, *Lorely*, *Lohengrin*, *Monsieur*, *Mrs. Alan Gray*, *Nibehungren*, *Oriflane*, *Prosper Laugier*, *Princess Victoria Louise* and *Rhein Nixie*.

Of the beardless Iris the following are good: *Aurea*, *Longipetala Superba*, *Lord Wolseley*, *Kermesiana* and *Notha*.

*Ochroleuca Sulphuria* is a lighter yellow than *Aurea*, but is often sold for it.

The best of many varieties of the Siberian Iris: *Blue King*, *Grandis*, *Lady Godiva*, *Snow Queen* and *Superba*.

There are many varieties of American origin which compare favorably with the best imported varieties.

WILLIS E. FRYER.

Join The American Gladiolus Society and be identified with an organization of nation wide scope and unquestioned purpose. Those who are real Gladiolus enthusiasts should join from an unselfish motive.

## The Flower Grower

PUBLISHED MONTHLY ON THE FIRST OF THE MONTH BY  
MADISON COOPER, CALCIUM, N.Y.

FOR BOTH AMATEUR AND PROFESSIONAL FLOWER GROWERS

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OUR MOTTO:  
*Special favors to none, and a  
square deal to all.*

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Growers are invited to contribute articles or notes over their own signatures, but the Editor reserves the right to reject anything which in his judgment is not conducive to the general welfare of the business.

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Vol. V March, 1918 No. 3

"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### "Pigs is Pigs."

As a continuation of the subject of "Patriotism, Pigs and Poses," our editorial in last month's issue, one of our subscribers suggests that we should say something about the price of a pig. Years ago a pig was worth \$1.00. Later he advanced to the dignity of \$1.50 or possibly \$2.00, and gradually increased in value until during the spring of 1917 the average price was about \$5. We were able to secure \$6 each for pigs eight to ten weeks old and weighing from 20 to 25 pounds and they were cheap at this price. While a pig is a pig, there is a big difference in pigs, and while some pigs would be cheap at \$6, others might be dear at \$5. It depends on the age, condition and weight. A well grown pig weighing 20 lbs. at six to eight weeks old should be worth \$6 quick. If you buy a pig six weeks old and weighing perhaps 15 lbs., \$5 is enough, and perhaps too high a price for him. Then again fall pigs never sell as high as spring pigs as there is not the demand for them, and besides the cost of production is very much less for fall pigs than for spring pigs so that with the price of spring pigs at \$5 to \$6, fall pigs sell at around \$3.50 to \$4.50.

The prices mentioned above are only given as a guide and may vary with locality, and we honestly believe that the prices above mentioned are \$1.00 too low considering the price of grain during the past winter. Therefore, if you can buy pigs at about the prices above mentioned you are buying them low enough and if you can get them cheaper you are securing a real bargain.

Anyway, buy a pig if you can possibly find a place to keep him. He will not only save you some money, but he will prove of educational value to you.

MADISON COOPER.

### American Gladiolus Society.

As explained on page 29, the Membership Committee of the American Gladiolus Society, headed by Joseph J. Lane, has undertaken a campaign for the increase of membership, and the Executive Committee has authorized the waiving of the membership fee until June 1st. In other words, anyone can join until that date by paying the regular annual dues of \$2.00.

As a still further inducement to join the society an arrangement has been made with THE FLOWER GROWER whereby this publication will be sent to all members during the life of their membership.

We urge that all who are interested in growing the Gladiolus join the society. A large membership will have great weight in accomplishing results which cannot otherwise be secured. There is no reason why the society should not have a membership of 1000. The benefits of membership are obvious and the privilege of association with a national body of this kind is valuable for all who are interested in growing the Gladiolus.

Membership blanks may be had on application to Joseph J. Lane, Chairman, 120 W. 32nd St., New York, N. Y., or to Prof. A. C. Beal, Secretary, Ithaca, N. Y.

MADISON COOPER.

### Alkali or Acid Soil for Gladioli.

One of our subscribers brings up the question as to whether the Gladiolus demands an acid soil or an alkali soil. In other words, does the Gladiolus favor a soil well filled with lime or a soil which is inclined to be on the sour or acid order? We print this note for the purpose of drawing attention to the subject and for the purpose of asking for further light on the subject.

We personally have used wood ashes in small quantities almost every year on a sandy soil and with good results. We suppose the use of wood ashes yearly would result in an alkaline soil. Some of our friends who are commercial growers can tell us a lot of things about this subject if they will only take time to do so and we hope to hear from them.

Last year was a year of war gardens and somewhat to the neglect of flowers. One of our correspondents suggests that he already sees a reaction in the attitude of people toward flowers, and that one of the Chicago gardening clubs has launched a campaign for more flower gardening in connection with vegetable gardening. The natural outcome of the present situation will be that when the war is over and we return to normal conditions, those who have made war gardens for the production of foodstuffs will become greatly interested in flowers. We look for a boom in flower growing after the war.

Last month we promised to print an article on the result of a war garden which was planned, worked and the results recorded by a man who knows how to make a garden, Clarence Wedge, of Minnesota. We are holding this article over until April, which is, in the north, in plenty of time to make a garden. The article describes a garden one rod wide and two rods long. Larger space could be utilized on the same general scheme. It is not often that actual results and figures are given as they are in this article which was prepared by Mr. Wedge for the Minnesota Horticultural Society.

More attention seems to be given each year to *Primulinus Hybrids* and some of the named varieties of this type of flower which have been put on the market have rare merit. Even the most insignificant *Primulinus Hybrid* is so distinctive in form and habit of growth that it is interesting. No Gladiolus grower will make a mistake to have a collection of *Primulinus Hybrids*. Start with the mixed seedlings without name.

## The Glad Philosopher's Musings.

[Written expressly for *The Flower Grower*.]

A Rose by any other name than *Suzanne Marie Rodacanachi* or *Gloire de Chedane Guinoisseau* would smell as sweet, and a Peony named *Sir Spencer Ponsonby Fane* or *Prince Pierre Troubetskoy* is not one whit more beautiful for bearing such a stupendous appellation. *Killarney* has much sweeter fragrance than either Rose, and *Venus* is far more beautiful than either Peony. Why do the disseminators—generally foreign—saddle such awful names on some of their productions? It is providentially fortunate that they seldom have merit enough to become popular—how trying it would be to have to answer our friends' inquiries for their names, were the flowers strikingly beautiful.

If the Glad Philosopher were about to christen a new variety, and in doing so wished to honor a friend, or adulate a titled dignitary who might happen to be afflicted with a name as long as either of the above, said friend or dignitary would first be importuned to go before the court and make application to have his name changed to Joe Hepp, or Bill Jones, or some other one equally easy for the flower-loving public to remember.

The practice of selecting names that are moderately short and euphonious, especially those that are in themselves suggestive of certain qualifications or peculiarities of the flower is most commendable and should be further encouraged. It would be hard, indeed, to improve on many of the names that have been given to some of the choicest varieties of the *Gladiolus*. Long live the popularity of such sensibly-named ones as *America*, *Niagara*, *Panama*, *Independence*, *Peace*, *War*, *Dawn*, *Love-ness*, etc.

It is fortunate for the popularity of the variety *Negerfurst*, especially in the southern states of the U. S. A., that its name is not pronounced phonetically as it is spelled. The proper pronunciation is as if spelled *Nej-er-furst*, accent on first syllable.

The creator of a fragrant *Gladiolus* will have done much for the flower-loving world. The lack of perfume in that beautiful flower seems to be its only shortcoming. And yet this deficiency is deemed to be for some purposes its best recommendation, for is it not the funeral flower par excellence because of the absence of those heavy, sickening odors that characterize some of the flowers often used for that purpose?

### THE GLAD PHILOSOPHER.

The Glad Philosopher has some very pointed and helpful things to say and we expect to have him with us each month for several months to come. He sees a lot of things that are not plain to many of us.

## Do *Gladiolus* Corms Grow Old?

BY R. C. H. LENSKI.

[Written expressly for *The Flower Grower*.]

I have some notions of my own in regard to *Gladioli*. Some of them, I fear, are not quite orthodox. I cannot help that—I hold them nevertheless.

This thing about "old" corms is one. Even the editor himself believes that corms grown year after year deteriorate and finally become worthless. The finest result is said to come from corms two years old if well grown, or three years old if grown less strongly. Let me say frankly that my experience does not bear this out. To be sure, fine, fat, round, young corms rapidly grown give very fine results. But large, fullgrown bulbs, older by one or several years, will give equal and still finer results. I have had the most excellent results from such "old" corms year after year. In fact, the larger the corm, the better the result is likely to be. When corms grow larger from year to year, they often become flat and wide, but, if grown in good soil, these large corms usually throw two, sometimes three flower spikes and produce new corms and cormlets accordingly. Even corms which have not done well in one season for some reason or other, may be expected to become large and fine the following season and after, if placed in a good location and grown in first class soil. And this, I think, may be expected to continue indefinitely. My conviction may seem heretical, yet I have based it on my experience and observation alone.

Mr. Kunderd sent me one corm of *Fair Columbian* three years ago. It grew in fine shape and bore just about 100 cormels. These I broke out of their little husks and planted close by the gate to my poultry yard, where I could throw the water from the drinking vessel of the hens when I gave them fresh water daily. A number of these cormels bloomed the first season, and the old corm, quite large when planted, bore three fine bloom spikes, and besides this furnished a lot of cormels. All the 100 cormels had a lot of new cormels. I planted all of these *Fair Columbians* in a row, sowing the cormels at one end quite thickly. I harvested the lot last fall, now about 125 fine corms, many of them very large, and cormels galore. According to rule the original corm should now be considered "old" and decreasing in vitality. But I do not think any *Gladiolus* grower could possibly tell which the old corm in my basketful is now—it is there, of course, but in a new guise, as full of life as ever. This *Fair Columbian* is a "fair" example, by the way, of what one can do with a single bulb. At the rate it is going I will have to give it the whole garden for itself in a few years.

Note by the Editor—

It would seem that the only way to determine positively the effect of age on *Gladiolus* corms is a test covering a considerable period of years, at least five or six years. Who is ready to make such a test and keep records?

## THE PEONY.

NOTES ON THE PEONY.

BY E. Y. TEAS.

[Written expressly for *The Flower Grower*.]

Peonies are among our most beautiful and desirable hardy herbaceous flowering plants. The old fashioned red, *Officinalis Rubra Plena* has been cultivated in England more than 100 years and in America at least 80, and is today one of the most beautiful. It is a native of Switzerland.

There are now more than 500 named varieties in cultivation, all hybrids of Chinese and Japanese varieties, none are earlier and few more beautiful than the old fashioned crimson. The newer varieties lengthen the season of blooming near a month.

The greatest demand for cut bloom is, in this locality, Decoration Day, May 31st. There are few except *Officinalis* that meet this demand usually.

For quick results plants two years grown since division should be used. Those who wish to increase the number of their plants quickly, without regard to the bloom, should divide 2 or 3 year clumps with 4 to 6 plants for resetting, without expecting much bloom until the second year.

In our latitude, about the end of August is the date when Peony roots are at perfect rest, and this is the best time to replant. If plants are dug about this date and reset in moist soil they will begin to form new roots within two weeks, thus being in better shape for future growth than though removal is delayed till fall or spring. Peonies delight in rich, strong soil.

It is an advantage to some after planting to mulch the surface to a depth of about two inches with fresh stable manure. This will tend to keep the soil moist through the autumn drouth and protect the plants from being lifted out by freezing and thawing in winter and spring, besides the fertility in the manure will settle in the soil for the sustenance of the plants.

Peonies after standing in one place five or six years become root bound and lose their vigor and size of bloom. I find it well in such cases to take a sharp spade and cut down in the center of the clump about a foot deep and take out half the clump, filling the hole with rich soil, so new roots may reach fresh soil and revive the plant.

A mulch of fresh manure every winter is a benefit to the plant, however, it may be unsightly.

Peonies as well as the *Gladiolus* bloom more beautifully in our Northern States and Canada than in the warm South.

The weather has been so depressing and disagreeable during the winter that many people have put off ordering their bulbs and flower seeds and plants until past the usual time when they order. We urge that those who have not already ordered should get busy and do so at once.

## THE ROSE

[Written expressly for *The Flower Grower*.]

### Some Hints on the Pruning of Roses.

IN THE PRUNING of all shrubs one must be guided by a knowledge of their individual flowering habits. For instance, the Spirea and the Berberry flower on the wood growth of the last season, while the Hydrangea flowers upon its new wood growth. The Spirea and the Berberry, therefore, must not be pruned in the spring before flowering, or the very source of the flowers may be removed. The Hydrangea, on the other hand, should be pruned in the spring so that it will throw out new wood upon which the season's flowers are to set.

The Rose family is a very large and cosmopolitan one, and embraces plants and trees with all manner of habits, and even our decorative garden Roses embrace many kinds, requiring diversified treatment, some of them demanding early spring pruning and others that they must not be pruned until after flowering. To give complete instructions for pruning Roses would require a rather lengthy treatise, but one or two general rules will enable anybody not already familiar with proper pruning requirements to get satisfactory results.

As pruning Roses is done mainly for the purpose of stimulating growth, a safe rule to follow is to prune in proportion to the natural vigor and growing habit of the plant. Thus, a strong growing Rose requires but little pruning, while a weak growing one requires much. It follows then that climbing Roses, which produce their flowers from last season's wood and also grow vigorously, require little or no pruning, it being only permissible that dead wood and old wood that is past bearing be cut out. To prune them severely would probably prevent them from blooming that season. Every few years an extremely cold winter kills back to the ground the climbing Roses in northern latitudes, and the following summer no flowers, or few flowers, are produced, but vigorous vine growth results instead.

Hybrid perpetuals and hybrid teas, the bush Roses of our gardens, require more or less pruning according to their habit of growth, but much more than climbing Roses. Tall growing varieties should be cut back at least one-half; better, two-thirds or even three-fourths. In fact it is not uncommon practice to cut hybrid teas back to within two or three buds from the ground in the case of weak growing varieties, and the stronger growing ones to within eight inches or a foot at most. It is well to understand that severe pruning results in a diminished number of flowers, but what one loses in quantity he will gain in quality, as the flowers will be both larger and more perfectly formed.

As regards the proper time, the hardier varieties will need pruning earlier than the tender ones. The operation should not be long delayed after the first signs of returning life is observed, as evidenced by the bark becoming green and the buds swelling. By this time the dead wood can be recognized beyond doubt and removed. All weak growths should be cut out, leaving only a few of the strongest canes and these should be cut back in proportion to the growing habit of the plant as previously explained.

It is important that a sharp knife be used, or better still, sharp pruning shears, that the wood be not torn nor the bud bruised, and it is always best to cut just above an outside bud so that the resultant branch growth will be outward to make an open head that will allow sunlight and air to enter readily.

As the sharp pricklers on the dead canes inflict painful and unsightly wounds, a pair of canvas gloves will be found to be of good service during the operation of pruning Rose bushes.

H. G. READING.

### Awards by the General Bulb Growers of Haarlem.

We are informed that the following awards have been made by the respective committees of the General Bulb Growers' Society of Haarlem, Holland, during the year 1917:

#### FIRST-CLASS CERTIFICATES.

##### GLADIOLUS PRIMULINUS.

Scarletta, orange red shaded brick-red.

##### GLADIOLI.

Mrs. Velthuys.

Mrs. F. Pendleton, creamy-white shaded rose with purple-red spots.

##### DAHLIAS.

Sulphurea, (decorative), sulphur-yellow.  
Vauubaak, (decorative), scarlet and orange.

E. F. Hawes, (Cactus), dark velvety-purple.  
Velours d'Utrecht (single), dark velvety-purple.

Franz Ludwig (Peony flowered), clear mauve.

President Washington (decorative), lilac-rose.

#### AWARDS OF MERIT.

##### GLADIOLUS PRIMULINUS.

Hesperia, salmon.  
Laetitia, salmon-rose.  
Salmonea, clear salmon-red.  
Jane, yellow with clear salmon markings.  
Maiden's Blush, salmon rose spotted white.  
Sylphide, apricot, spotted clear yellow.

##### GLADIOLI.

Lena, purple, spotted brown.  
Lily Lehmann.  
Red Canna, dark purplish-red.  
Yellow Standard, yellowish-green shaded lilac.

Goliath.  
Mrs. K. Velthuys.  
Prince of Wales.  
Aurora.

Golden West.  
Mr. Mark.  
Liebesfeuer.  
War.  
Nora.

##### DAHLIAS.

Penserosa, (decorative), lilac-rose.  
La Reine, (decorative), milk-white.  
Renselaer, (decorative), dark velvety-red.  
Moore, (Peony-flowered), dark brown.  
Melody, (Collerette), clear purple-violet, collar pure white, from seeds.

Cunera (decorative), lilac and creamy white.

Mont Blanc, (decorative), pure white, shaded rose.

Adagio, (Collerette), rose violet, collar cream.

Orange King, (decorative), amber and gold.

Soleil d'Octobre, (decorative), clear yellow.

Purity, (decorative), salmon-red and lilac with apricot colored centre.

Rigida, (decorative).

Yellow Star, (decorative), sulphur-yellow.

Mrs. White (decorative), rose-carmine.

Jo Ballego (decorative), orange.

Salmon Queen, (decorative), salmon.

Dream, (decorative), apricot with amber.

Carmen Sylva, (decorative), salmon shaded yellowish lilac.

Brandaris, (garden cactus), clear yellow.

Mea Vota, (decorative), clear orange shaded apricot.

Marie Cats, (decorative), pure white center shaded green.

Mars, (decorative), carmine shaded amaranth.

Sunflower, (decorative), dark yellow.

Buff Queen, (decorative), old gold shaded with cinnamon color.—*The Gardeners' Chronicle*, (England.)

### Safety Packing for Express.

We have perfected a system of packing green-house plants for shipping by express, during the continuous cold and zero weather, which has proved entirely satisfactory. We have sent plants to northern New York, Connecticut and other points. Each plant is well wrapped in a good-sized piece of newspaper and packed in a box heavily lined with paper. After the lid is nailed on, the box is wrapped in heavy paper and then placed in a larger box that will give a space of about two inches all around the box containing the plants. Two inches of fine, dry shavings are put in the bottom of the larger box and the smaller box then set in and the space all around and on top is filled tightly with shavings and the lid nailed on, when it is ready for tagging and shipping. Our customers responded at once, commenting very favorably upon the successful packing and good condition of the plants upon arrival, though going through zero storms.—*JOHN F. RUPP*, in *Florists' Exchange*.

There have been many complaints this year about bulb stock frozen in transit especially by express and it has been caused largely by the great delays experienced. Packages require as long or even longer by express as would ordinarily be necessary by freight. No amount of care in packing will protect from low temperature continued for several days.

Metzner Floral Co., Mountain View, Calif., sent us a large corm of one of their unnamed seedlings which was apparently one of three which formed on the old corm. This single corm sent us weighs 6½ oz. and measures 11 inches in circumference.



## WAYSIDE RAMBLINGS

### A BEGINNER IN GLADIOLUS GROWING.

I have been a Dahlia grower for over thirty years and have grown for the trade in a small way for twenty years. My business is not large but I keep it where I myself can personally prepare all my bulbs for the purchaser, thereby having but very few mistakes. I visit the garden of the large grower for the greater part of my selections after watching the good and bad qualities of the desired varieties.

Three years ago I was advised by a friend to grow Gladioli. I commenced with 500 bulbs or corms, the next year I increased them to about 2,000 and beside all the pleasure they were to me as cut flowers for my own home, a florist heard of my fine specimens and consequently they found a ready market at a good price. During the past year my trade has increased rapidly. I also surely had a "Beginner's Experience." I purchased several hundred corms of a reliable grower well known by the most of you, and as one must not expect too much from a mixed variety, I purchased several dozen of his very best named varieties. The following year I sold the *whole lot* purchased of the "reliable man" as a cheap mixture. Some I paid 25c. each for I gladly sold for one cent each to get rid of them.

We need experience and we get it. My Gladioli are beautiful and much sought after by people who see them. I try to give all who purchase either Dahlias or Gladioli a square deal and consequently am able to keep my customers, who in time become firm friends. I could not do without THE FLOWER GROWER, for it has taught me how to care for my Gladiolus corms and cormlets and I rarely lose one.

Can any one advise me as to planting sweet pea seed in the fall for early spring flowering? I have two pounds of seed planted Nov. 11th, and am anxiously awaiting results. At the present time I am watching Sweet Peas and Gladioli blooming amid all the beautiful Roses, Poinsettias, and Cacti and many other beautiful flowers in Florida.

C. B. F. (Massachusetts).

### STORING DAHLIA TUBERS.

In the December number of THE MODERN GLADIOLUS GROWER, Paul L. Ward gives a perfect method of wintering Dahlia tubers, which he states he has practiced for years without the loss or shriveling of a single tuber. But in describing his said method he omits to state the all important thing to know and that is the winter temperature of his cellar.

If a cellar is too cold the tubers will surely rot and if it is too hot they are bound to shrivel. His cellar must be exactly right. What is the temperature?

D. W. C. R.

### ORIGIN OF VARIETIES.

In reading G. F. Woodruff's article in the January issue my name seems to be prominent without connection. This brings to mind the article in Dec. issue by B. F. Stalnaker. Discussions of this kind are not of real interest to the public, but as every "knock is a boost," I perhaps should not complain. I will, however, try to explain:

Any grower who keeps records of his stock, buying from other growers, as well as hybridizing himself will find many duplicates. To get the best, one does not buy mixtures, although the best varieties sometimes get into the mixtures. It seems to me that to the man who, by his labor, thought and expenditures puts upon the market a new variety, to him belongs the credit. Others may have found a similar bloom, admired it, and numbered it in his private collection, but what's in a number? Any hybridizer will have many varieties he might name, but few will be worth while. I am willing to be called the god-father—if that's the new name—to such winners as *Crimson Glow*, *Maize* and *Mrs. A. C. Beal*. *Crimson Glow* originated by Mr. Betscher, and two last named by Mr. Umpleby. Credit has already been given to these gentlemen. In regard to *Sunset*, *Amethyst*, *Mrs. Lancashire* and *Rouge Torch*, seedlings that originated with us several years ago, and which have become widely scattered, it is not at all strange that some would be found in a mixture, even though they have been purchased from another hybridizer. I have thrown many high priced varieties into my mixture because I did not consider them worth cataloguing. All varieties named by me before 1917 have been certificated and recorded through the proper horticultural methods.

B. HAMMOND TRACY.

### SEVEN GLADIOLUS CORMS FROM ONE.

One of our subscribers sends us seven divisions resulting from one Gladiolus corm planted. Each division apparently had a stalk, but judging from appearance probably none of them bloomed. Our impression is that when a large number of divisions result from one corm that they are weak and of small value for bloom when planted. An experiment which we conducted along this line goes to prove this impression, but we are not yet prepared to make a positive statement to this effect. Anyone having experience or having made tests and who can throw any light on this subject, we should be glad to hear from.

A bulb dividing in this way is usually an old one and usually the divisions do not bloom. However, we are only giving our own impression and would be glad to hear from others.—Editor.

### ORIGIN OF VARIETIES.

Since reading what friends Stalnaker and Woodruff have said in the December and January issues, it seems that an explanation from me is necessary to throw a little light on this subject, especially as to the varieties that I have listed under number.

Several years ago I bought 1,000 mixed selected seedlings of S. Huth, Cuyahoga Falls, Ohio, who, I understood, was Matthew Crawford's son-in-law. That mixture was said to be composed of some of the best, selected from the millions of seedlings that had been grown by Mr. Crawford, who was the pioneer Gladiolus seed planter of America. The mixture contained only a few varieties. The first year I segregated about 100 bulbs of a large pink variety and called it *Early Pink* on account of its extreme earliness. The second season I marked out four more varieties that were not very numerous and designated them *H-1*, *H-2*, *H-3* and *H-4*. Later, because it required too much time explaining what the H meant, the designations were changed to Nos. *111*, *112*, *113* and *114*.

I think Matthew Crawford should have the credit of originating these varieties. While attending the annual meeting of the American Gladiolus Society at Chicago in 1912, I talked with both Mr. Crawford and Mr. Huth in regard to these varieties, and neither of them intimated to me but that they were originated by Mr. Crawford at Cuyahoga Falls, Ohio.

This mixture was widely disseminated by Mr. Huth and re-sold by some as Groff's Hybrids, on account of the advertising that Groff's Hybrids had received at the St. Louis Exposition.

For the purpose of testing new varieties, I have bought most of these varieties under different names from other growers. No. *113* has been sold by the thousands as *Beulah*, *Jane Dieulafoy* and *Rouge Torch*.

*Independence*, *Blackhawk*, *Mrs. Frank Pendleton* and many other good varieties were not considered worthy of a name by their originators, until their merits had been discovered by others who segregated them from seedling mixtures.

G. D. BLACK.

### SPROUTING BULBLETS BEFORE PLANTING.

I use boxes about 18 inches square and about three inches deep. The bottom of the box is covered with about one-half inch of rich soil. I use spent manure soil from hot-bed. Then a layer of bulblets and a layer of soil, only enough to cover the bulblets out of sight and repeat the same to within an inch of the top of the box. Thoroughly soak with water and cover with a wet burlap sack. Put in a warm place exposed to artificial heat. I put them under the kitchen range and they sprout quickly. My experience is that this is a very effective method no matter how dry the bulblets have been kept. When the bulblets show a large percentage of sprouts they are sown

thickly, soil and all, in a prepared trench. Great care should be taken to keep the bulbets from drying out during the sprouting process.

FRANK B. REID.

#### SHOULD GLADIOLUS TOPS BE REMOVED AS SOON AS BULBS ARE DUG?

Our long experience has shown us very clearly that cutting the tops off of Gladioli as soon as they are dug to be best.

Mr. Gardner says in his note in the February issue of THE FLOWER GROWER his theory has been that to leave the tops on will produce "firmer and plumper" bulbs. When tops are left on, instead of the strength from the tops going to the bulbs the strength from the bulbs goes to the top until the top is dead, thus decreasing the size and strength of the bulb instead of adding to it. You will agree with me, that as long as the plant is in the ground the tops get the nourishment through the roots and bulb. Then it is natural that the same will continue after it is dug. I have often observed that Gladioli dug and top left on had shrunk by at least one-fourth in size and were not nearly so plump and nice.

Besides leaving the tops on would be an impossibility in the case of a large grower, where he has many acres of bulbs and many hundred varieties. In our case leaving the tops on 1,400 bushels and nearly 5,000 varieties, which we are growing separately, would mean at least three times as large a store house as we have.

I would advise that the tops are not broken off, but cut off of all bulbs larger than  $\frac{3}{4}$  inch. This is, if anything, faster and is much better. My record in cutting them is 117 in one minute, and doubt if any one can do better in breaking. The best thing to use is a good strong sheep shears. Leave no top on at all. Cut them off at the bulb. If you are afraid to try this on all of your bulbs, try at least a few, and let us know what success you have had.

As to removing the old corms from the bulbs, we find that with exception of a few varieties, that it is best not to remove the old bulbs until they come off easily. Do not leave them on any longer. By trying them once in a while you will know when they are ready to be removed. The varieties *Mrs. A. E. Kunderd* and *Parexel* are the only ones from which we remove the old bulbs as soon as they are dug. All of the others are first cured for some time.

ANTHONY B. KUNDERD.

#### ROSE—TAUSENSCHÖN.

The climbing Rose, *Thousand Beauties* is deserving of all the praise that Mr. H. G. Reading gives it in your January issue. In my opinion, this Rose is well named and just as valuable as *Dorothy Perkins*. It is very distinct from that variety, in fact totally unlike it and does not conflict with it in season of bloom, because it blooms several weeks earlier. To see this Rose is to want it.

H. W. GROSCHNER.

#### RUST ON GLADIOLUS FOLIAGE.

I notice in the December number of THE MODERN GLADIOLUS GROWER an inquiry with regard to "Rust on Gladiolus Foliage" and your reply.

Mr. Black and I, as well as some larger growers, came to the conclusion that the rust was not the result of any disease or weakness of the corms; that it attacked especially some of the strongest growing varieties and that it was not carried over in the corms to the next year. It seemed to have no effect on the corms except to arrest the development of corms and formation of cormels which would have taken place if the growth of tops had not been stopped by the rust. The blight most often attacked the plants just when they were in full bloom, causing the stems to become soft and spongy and to fall over. The varieties which suffered most from the rust were *America*, *Mrs. F. King*, *Independence*, *Taconic*, etc. *Augusta* and, I think, *Minnesota*, seemed to be immune. Yet, *Augusta* is often affected with bulb disease. The rust seems to be strictly a leaf disease, and is carried rapidly across the field, especially in heavy dews. Doubtless it is carried by walking through the patch, carrying it on the clothing or tools. I remember that *Golden King* was another strong variety which was liable to the rust, or "blight." I say "was," for I have not had it for three or four years.

When we found it attacking a variety we would go in when the tops were dry and dig all that were affected, whether they were mature or not. I think spraying with Bordeaux mixture will tend to prevent the rust if applied in time, but it is difficult to make it stick unless mixed with something like a thin paste.

Mr. Black thinks the blight has an alternate host, as many other rusts have, and that the other host is crab grass. I doubt it but he may be right.

GEO. S. WOODRUFF.

#### GLADIOLI AND CARNATIONS.

Noting from the January FLOWER GROWER that Gladioli with Carnations can be worked at times, I beg to submit the experience of a friend of mine.

I asked him why he did not put something in the vacant spaces like Gladioli. He said he had no more as the *Blushing Bride* and *Peach Blossom* that he used were all planted. I sold him some *Panama*, *Halley*, *Princeps* and *America*. He planted them, three or four bulbs in place of one Carnation, and also along the edge of the entire greenhouse. His results were fine, and he did the same again last year using new bulbs of course. Again his results were very good and he got big prices for his bloom. This year he planted about 10,000 bulbs. This shows plainly that he is satisfied with the scheme. He has omitted *Princeps* from his varieties as he finds it rather late and uneven in growth. He gets the best results from *America*, *Panama*, *Halley*, *Europa*, *Mrs. Francis*

*King* and *Niagara*, and considers *Panama* and *Niagara* the best. He is experimenting this year with other kinds as well. He plants the last week in December and the first week in January, but no later; and his bloom is extraordinarily fine. I have never seen such big strong spikes and especially *Panama*.

JOHN ZEESTRATEN.

#### GLADIOLUS BULBS GROWING ABOVE GROUND.

This year I noted a thing I have never seen recorded about Glads, *i. e.*, bulbs growing above the ground, upon the stalk. Several of my Glads acted up this way. *Kunderd's Butterfly* is an example. It bloomed first on June 25. A month later new narrow leaves appeared, growing out of the intersection of one of the upper leaves and the stalk. In October a flower spike appeared and bloomed. Investigation showed that this new flower spike led to a corm about  $\frac{3}{4}$  in. in diameter growing upon the main stalk (under the leaves) about one foot above the ground. In another case the corm was smaller and only a few inches above ground and it did not bloom. I have had other corms bloom a second time the same season, in a similar manner, but the second spike led directly through the plant, along the side of the main stalk, to the planted corm. When the corm is ripe the base of this second spike shows as a raised portion, like the upper part of a small corm.

C. M. S.

#### FORCING GLADIOLI.

Those of our Glad lovers who wish a few early flowers should start the bulbs in pots or boxes in February. Pots are best but more expensive. A box six inches deep will do very well. Put in four or five inches of good garden soil that is moist but not too wet. Now set in the bulbs about one inch apart and cover well with moist soil or sand. Box should be set on the floor of a dark, cool cellar for six weeks. Here they will form a large root growth without growing top, which is quite essential if we would have good flowers. The failure in this point is, I believe one cause of "blindness" in late planted bulbs.

After keeping these bulbs in the cool cellar for six or eight weeks they can be set out in the garden where they are to bloom and should make a rapid growth.

The soil should be wet thoroughly before taking out of the pots for setting to cause it to hold together better and will not separate from roots so readily.

Let us have the experience of others.

"AMATEUR JOE."

The U. S. Department of Agriculture, Washington, D. C., can furnish Farmers Bulletin No. 818, entitled "The Small Vegetable Garden. It is valuable for the subject which it covers.



[This department of THE FLOWER GROWER is intended to be one of its most helpful and valuable features. All questions asked in good faith and which are of general interest will have careful attention. The full name and address of the writer must be given, but not for publication.]—EDITOR.

### Gladioli on Same Ground Annually—Maintaining Fertility.

TO THE EDITOR:—

On my lot there is only a small piece of ground which I can utilize for Gladioli, and as I am not prepared to change locations of planting each year, I would like some information and suggestions.

In the fall of 1916 I had my ground heavily covered with well-rotted manure dug in. Another heavy coating was put on in the spring of 1917. I am almost compelled to use the same ground. Although I have plenty of land in other places it is not where I can utilize it.

Please let me know if I can continue to use the ground year after year with satisfaction, and suggestions for putting it into best possible shape would be acceptable.

Can I use commercial fertilizer or a light coating of sheep manure to advantage?

A. S. F.

**Answer:**—The objection to using the same land year after year for the same crop is partly because of the liability of increasing of disease, but also because of exhaustion of certain fertilizing elements which any given crop takes out of the soil. There is still another objection in growing Gladioli, and that is that if the bulbets which are accidentally left in the ground in digging are not thoroughly frozen each winter these are likely to come up and cause a mixture.

We use the same ground year after year to some extent but really intend to put our best stock on ground which did not grow Gladioli the preceding year. A good rotation is to grow vegetables one year and Gladioli the next. A still better rotation would be a green manure crop like rye and vetch after vegetables.

If well rotted manure of good quality is used commercial fertilizer should not be absolutely necessary, but no mistake will be made in using acid phosphate at the rate of 500 to 1000 pounds per acre. This may be broadcasted in the spring before cultivating. Wood ashes put on at about the same rate or even heavier each year will prove very useful.

Sheep manure is chiefly valuable for its nitrogen content and is best used after the sprouts appear and every two weeks until blooming time. It should be put on in very light applications broadcasted by hand and promptly worked into the soil.

Thoroughly working the soil both fall and spring is desirable and the small gardener has the advantage of the large one in this respect—that he can probably get the work done—

whereas the large gardener is likely to find so many things to do in the fall that his plowing is not done until spring.

### The Best Climbing Roses.

TO THE EDITOR:—

Will you give me names of two or three of the best hardy climbing Roses (outside of *Crimson Rambler* and *Dorothy Perkins*) that have healthy foliage? If there is only one Climbing Rose that is perfect in foliage, flower and hardy, I would rather have all of that one variety than more varieties that are less hardy and healthy and without perfect foliage.

New Madison, O.

**Answer:**—After many years' test we still consider *Dr. W. Van Fleet* the finest of all hardy Climbing Roses. Its firm, large, glossy leaves, and long-stemmed, beautifully finished shell-pink flowers, suggest a greenhouse Tea, rather than a hardy climber. If we had only one climbing Rose, this would be our selection. A worthy companion to it is *Silver Moon*, with large, showy, semi-double white flowers, having conspicuous golden stamens. The leaves are large, deep green and glossy, the growth vigorous. Although its striking beauty is derived from the Southern Cherokee Rose, *Silver Moon* is very hardy. Another vigorous climber with fine foliage is *American Pillar*, which has large single flowers of bright cerise, shading to white at the base of the petals, with showy golden stamens. The flowers are produced in clusters, and are very striking; American gardeners hardly appreciate the beauty of single Roses, and *American Pillar* is not so freely planted as it deserves. Another Rose with very good foliage is *Ruby Queen*, with bright cerise flowers, larger than the *Rambler* type, very freely produced; it is a rampant grower, hard to keep in bounds. These four varieties should be in every collection. *Tausendschon*, with its enormous profusion of long-lasting pink flowers, that gradually shade to white, has good foliage, and is very hardy; its habit of growth makes it very desirable as a pillar rose. *Rubin* is an attractive crimson climbing Rose that goes well with *Tausendschon*. All the above varieties have better foliage than the *Rambler* type, but there is a place for all, unless garden space is limited. If we were confined to two climbing Roses, our choice would be *Dr. Van Fleet* and *Silver Moon*, but there are also some meritorious new sorts which we have not yet fully tested.—*Rural New Yorker*.

### CLASSIFIED ADVERTISING.

Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.

**WANTED GLADIOLI**—Want quotations on planting size Gladioli and black bulbets. Must be young, healthy stock. State size and quantity; can use all varieties. Will pay cash. J. J. GRULLEMANS, 10126 Nanford road, Cleveland, Ohio.

**GLADIOLUS**—Guaranteed true to name.

	Per 100
America	\$1.50
Alice Carey	3.00
Halley	2.50
Lucretia	2.75
Mrs. Francis King	1.50
Velvet King	2.50
Willy Wigman	2.50

Price list of other varieties mailed free  
HENRY C. ECKERT, Belleville, Ill.

**GLADIOLI, No. 2** and planting sizes America, Mrs. Francis King, Niagara, Panama, Pink Beauty, Independence, Sulphur Queen, Princespine and Pendleton. War, ½ inch and under, \$1.25 per hundred; ½ in. to ¾ in., \$2.50 per hundred. Peace, ½ in. and under, 70c. per hundred; ½ inch to ¾ inch, \$1.40 per hundred. Postpaid at these prices. Write for wholesale quotations.  
JOHN B. HUMPHREY, Logan, Ohio, R. D. No. 3.

**W. E. KIRCHHOFF CO.**, Pembroke, N.Y., growers of the finest Gladioli, such as Pendleton, Panama, Niagara, Pink Perfection, Europa, Mrs. Fryer, War, Peace, etc. Correspondence solicited.

**ALL** the leading varieties of Gladioli and many newer ones, are offered in my new descriptive wholesale list, sent free. RAY P. SELOVER, Lakeside, R. D. No. 9, Auburn, N.Y.

**METZNER FLORAL CO.**, Mountain View, Cal., offer a special lot of choice Gladiolus bulbets, well assorted, in lots of 100; large bulbets, \$3.00; medium, \$2.50; small, \$2.00. Prepaid. A bargain.

**FOR SALE**—Gladiolus in mixture. Large, clean bulbets, 25c. per dozen; \$1.30 per hundred, postpaid anywhere in the 3rd zone. Will enclose one or more named varieties in each order. R. E. BOOMHOWER, Greenville, N.Y.

**CRACKERJACK**—A gorgeous flower. Large blooms of richly shaded velvety dark red. Throat spotted yellow and maroon. Special offer until April 15th: 20 large blooming bulbets, 50c. postpaid. Don't miss it! Gladiolus catalog free.  
HOWARD GILLET, Box F, Lebanon Springs, N. Y.

**GLADIOLUS**—20 named varieties, all different, \$1: 25 finest mixed, not labeled, \$1.00; 100 for \$3.50; young, vigorous, blooming sized corms, one inch or over in size; also hard-shelled cormels from our finest mixed strain, 25c. per hundred in any quantity; all postpaid. J. H. TILTON, P. O. Box 48, Salem, N. H.

**TITANIC** and many other new, beautiful Gladioli, all our own originations. Send for illustrated catalog. DECORAH GLADIOLUS GARDENS, Decorah, Ia.

**GLADIOLUS** Irrigation grown Planting Stock and Bulbets of America, Mrs. Francis King, Giant Pink, Twentieth Century, Panama, Pendleton Panama bulbets \$1.00 thousand. Pendleton bulbets \$1.50 thousand, \$12.50 ten thousand. Others by the peck.  
E. M. HOYT, Arvada, Colorado.

**CHOICE GLADIOLI** such as Schwaben, Loveliness, Europa, Pendleton, Peace, Mrs. Watt, Blue Jay, Pink Perfection, etc. Send for list. F. F. FLETCHER, Templeton, Mass.

**SURPLUS GLADIOLUS CORMS** Golden King, Jean, Panama, Wm. Mason, America, by the hundred. Mary Fennell, Europa, Niagara, Mrs. Pendleton, Peace, Mrs. King, Mrs. Watt, by the dozen. All large and good exhibition varieties. A good mixture 75c. a hundred. Write E. M. WILSON, 380 May Street, Worcester, Mass.

**50 OF KUNDERD'S** productions, such as Fair Columbian, Pr. of Goshen, Pendleton, 10c. K. Glory, 8c.; Violet Gl., Orange Gl., 40c.; Splendona, 18c., etc. Also Schwaben and Golden King, 10c. etc. Prepaid. Besides grand Dahlias. Write  
R. C. H. LENSKI, Bexley, Columbus, O.

**RARE BARGAINS**—Owing to limited space for planting must dispose of some of my bulbets. Will sell them for \$2.50 per 100. Will guarantee some of each in every lot, Pink Perfection, Mrs. Pendleton, Halley, Glory of Holland, etc.  
WM. H. LECKIE, 4512 No. Racine Ave., Chicago, Ill.

**FOR SALE**—Surplus stock of about 3,000 Gladiolus corms, blooming size, in mixture of the smaller type unnamed varieties and some named mixed; 75c. per hundred by express not prepaid.  
W. D. PITCHER, Buchanan, Mich.

**WANTED**—Gladiolus Planting Stock—25,000 to 50,000 each of Chicago White, Independence, Mrs. Frank Pendleton, Niagara, Panama, Schwaben, and Primulinus Hybrids. Quote prices on  $\frac{3}{8}$  to  $\frac{1}{2}$  and  $\frac{1}{2}$  to  $\frac{3}{4}$  in. sizes. Also 10,000 each, Baron Hulot and Pink Beauty,  $\frac{3}{4}$  to 1 inch. THE TEMPLIN-CROCKETT-BRADLEY CO. Station A, Cleveland, Ohio.

**GROW GLADIOLI FROM BULBLETS**—Easy, interesting, inexpensive—I will send 100 each of six choice varieties, including War, Pendleton and Schwaben, 600 in all, postpaid, for \$1.00.  
FRED P. WEBBER, Aquidneck, P. O., Newport, R. I.

**BIG OFFER**—To get acquainted—100 blooming size Gladioli for \$2.00 prepaid. This is the biggest offer ever made, as the mixture consists of the following named varieties and they will all be labeled: 4 each of Europa, Peace, Mrs. Frank Pendleton, Kunder's Glory, Schwaben, Princeps, Willy Wigman, Snow King, Charmer and Fascinator. 10 each of Chicago White, America, Halley, Baron Joseph Hulot, Mrs. Francis King and Primulinus Hybrids. Only one of these assortments to a person.  
F. M. PALMITER, Janesville, Wis.

**PRIMULINUS HYBRIDS**—35c. per dozen, \$2.00 per hundred prepaid East of the Mississippi River. Six at dozen rate, 25 or 50 at hundred rate. These are a fine strain and low price is made to reduce stock. Gladsheim Gardens, Southport, Conn.

## Our Garden in Winter.

[Continued from page 25.]

finite. That ever elusive, God given spark, that animates even the green slime of the wayside puddle, making it akin to man. Man, the gardener, is related, by reason of that spark of life, to the entire universe of nature. He is but the big brother of the puff ball. He is the acme of cell growth and stands on the apex of the gradation of life.

We like that idea of relationship of man to even the lowest forms of nature for it explains some things that would otherwise be unexplainable. We all believe in the law of atavism. Psychology recognizes it to a limited degree but we have gone deeper into this subject in order to explain the temperament of some of our acquaintances. When we see the "pusley" we think of a certain man of selfish, grasping nature with cold, clammy fingers. We say he is a lineal descendent of the line of pusley; the fellow who stings with his sarcasm and lacerates with his comment is but a larger accumulation of the cells that make up the nettle and the thistle. There is food for reflection in this for some one who has the time to go into it thoroughly.

Our garden in winter is the bed of Sleeping Beauty awaiting the Prince Charming of the Vernal Equinox to give her the kiss that shall awaken her. The East wind threw over her a coverlet of ermine; the North wind tucked in the corners, the South wind pressed down the edges and the West wind sings the lullaby songs of the season. The coverlet is of sparkling diamonds, a firmament of crystal stars, each vieing with another in beauty. It lies across the garden like a great white scroll on which we read the same promise we read in the rainbow of summer; "While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease."

Note by the Editor—

Mrs. Skinner gives us some thoughts on her garden in winter. It will be remembered that we printed an article from her pen in the December, 1916, issue of THE MODERN GLADIOLUS GROWER entitled, "A Summer in

Our Garden." Surely, the contrast between summer and winter is interesting.

Not many people would see as much "under the snow" when looking over their garden in winter as Mrs. Skinner has told us about and there are so many helpful thoughts in her article that we commend its careful reading and rereading to the student of nature especially.

## Catalogues and Price Lists.

Glen P. Howard, box 524, Harlan, Iowa.—1918 retail price list of a choice list of 16 varieties of Gladioli.

Decorah Gladiolus Gardens, Decorah, Ia.—Neat booklet illustrating the special varieties originated by Dr. Hoeg and others at Decorah, Iowa. Good descriptions and prices singly and by the dozen.

Metzner Floral Co., Mountain View, Calif.—List of the Metzner specialties for 1918. Also Carnations, Pelargoniums, etc.

Howard M. Gillet, Lebanon Springs, N.Y.—Booklet describing the best standard sorts with prices singly, by the dozen and by the hundred. Collections and mixtures also listed.

Wayside Gardens, Mentor, Ohio.—Twelve page catalogue and price list of Gladioli, Delphiniums, Iris, Phlox, Dahlias, &c.

H. E. Mason, Rocky Ford, Colo.—Catalog of Dahlias, Cannas and Gladioli, incidentally featuring the Rocky Ford cantaloupe.

E. M. Hoyt, Arvada, Colo. Wholesale list of eight standard varieties.

Fred F. Fletcher, Templeton, Mass.—List of some of the best standard varieties with retail prices.

H. E. Meader, Dover, N. H.—Illustrated catalogue and price list of Gladioli with special attention to the Kunder varieties. Hints on planting, culture, etc. The European varieties are given separate mention.

S. E. Spencer, Woburn, Mass. War time economy price list for 1918.

The Peony has one big advantage that is not present with the Gladiolus and other summer-flowering plants which are not hardy enough to remain in the ground over winter. The Peony is ready for business as soon as the sun loosens the grip of Jack Frost on the soil and gives us some early bloom. Hardiness is one of the strong points of the Peony, but a little winter protection is an advantage just the same.

## Keep the Home Flowers Blooming

**Salvia** (H'dy Sage) *Azarea grandiflora*. The flowers being sky-blue, and in greatest profusion, makes it prominent in the hardy border. \$2.00 per dozen, prepaid.

**Plant Perennials** and keep your home cheerful in spite of war. Plan your garden now and let us help you. Watch our Ads. Something new each month. We are at your service, so write.

**ORCHADOTTE FARMS**

Box M West Point, Pa.

**J. H. MCKIBBIN**  
GLADIOLUS GROWER  
DIVISION ST. GOSHEN, IND.  
WRITE YOUR WANTS

**deGroat & Stewart**  
Growers of Choice Gladioli  
We are offering Planting Sizes and Bulblets of several desirable varieties. We specialize in the choice American and French varieties. Catalogue on request.  
**Bath, N.Y.**

## To My Customers:

As I am entirely sold out of Gladioli for this spring, please do not ask for more prices, but drop me a card with your name and address and you will receive my price list for next fall as soon as ready.

JOHN ZEESTRATEN,

Mansfield - - - - Mass.

## Colorado Grown Bulbs and Seeds

Choice mixed Zinnias and Cosmos. Early dwarf mammoth flowering at wholesale prices to dealers. Some extra fine Dahlias. If interested in fine bulbs write at once for retail catalogue of Dahlias, Cannas and Gladioli.

H. E. MASON, Rocky Ford, Colo.

## 1000 Onion Sets for \$1.25

500 for 65c., prepaid anywhere in the United States. My special "HAZEL" size (about 3 qts.) Every set makes an onion. Finest quality sets you ever saw. Colorado grown. Satisfaction or money back. Colors, Red, Yellow or White. Order early.

J. D. LONG, Boulder, Colo.

## MAPLESHADE GLADIOLI

THE CHOICEST OF THE OLD, AND SOME VERY FINE NEW VARIETIES.

Send for price list.

Wilbur A. Christy, 315 N. Tod Ave., Warren, O.

## Derby Gardens Gladioli

LIST ON APPLICATION.

WHOLESALE. RETAIL.

John H. Umpleby, Lake View, N.Y.

## POTATOES-----50 NEW VARIETIES

can positively be grown from one packet of Hybridized Potato Seeds. Every hill will be different. All colors, shapes and sizes. May be worth a gold mine. Don't miss these rarest and most wonderful of Seeds. Packet, with directions, 15c., 4 for 50c., 10 for \$1.00. Please order now.

F. A. McDonald, Cavalier County, North Dakota, writes—

"The packet of Hybridized Potato Seeds brought splendid results. No two hills were alike. Some were white, some yellow, some red, etc. One plant bore 276 potatoes—some large as hen's eggs. Two remarkable freaks appeared. One ran like a cucumber vine, the other produced beautiful red potatoes—exactly the shape of a banana. I await future developments with great interest."

Seven Seedlings of Rare Value:

"I have a magnificent Seedling Potato grown from your Hybridized Seed, and have raised over 400 bushels. A prominent seedsman wants to introduce them and is trying to buy me out. I have six other seedlings that are more than good. E. A. Goodspeed, Onondaga County, New York."

GEO. S. WOODRUFF, Independence, Iowa

# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 4

April  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

### Peony Bloom for Red Cross.

[Written expressly for *The Flower Grower*.]

By J. P. SKINNER. (Iowa.)

WE NOTE A SHORT item in the March number of THE FLOWER GROWER relative to the sale of surplus Peony, Gladioli, and other bloom for the Red Cross, and soliciting suggestions from our readers.

This leads us to think that our experience last June with a special sale of Peony bloom for the Red Cross may be of interest to you.

We always have a large quantity of bloom that is too far along to ship to the florist trade, and rather than to see it go to waste, and to help in doing our bit, we decided to have a Peony Day.

The Red Cross Association was very glad to take the matter up, and carried it through very successfully.

Just at the time the bloom was at its best, we selected a Saturday for Peony Day, as Saturdays every one comes to town to trade and visit, and we wanted to reach the country folks as well as those in town.

The special Peony Day was advertised about two weeks in advance, all the local papers donating the space, giving the sale wide publicity.

The sale was conducted entirely by the Red Cross, they in turn interesting the Camp Fire Girls, who did the actual selling.

Three stations were secured down town, one in the post office lobby, and the other two in prominent stores, space being donated by all.

The sale started at 9:30 a. m. and closed promptly at 9:30 p. m., all bloom left over being sent to the sick, and to the hospital Sunday morning.

Three Camp Fire Girls were at each station, in relays, during the time of the sale, and other of the girls were on the street, so that it was a hard matter

for a person to get away from the Peonies that day.

We sold them for 10c. each, 6 for 35c., 12 for 50c., and at this rate, the girls received \$142.10 for the days sale, every penny of which went to the Red Cross.

We hope to better this sale this season, if the bloom comes good, for we are sure more enthusiasm will be shown now than a year ago.

It may be of interest to Peony growers to learn that the dark reds were more sought after than any color, which leads us to think that the growers who are making a specialty of the very light shades, are getting away from the popular demand.

#### A Red Cross Plea.

We believe that not enough attention is being given to the work of the Red Cross in this country. There are Red Cross slackers as well as slackers for army and navy service. The Red Cross has recently issued a statement of disbursements showing a large amount of work which has actually been done in assisting the allied cause. We plead for more interest in the work of the Red Cross. Much time and energy which is going to absolute waste or worse, could be put into productive work in connection with the Red Cross and thereby be made to help a cause which is the highest on earth. There is no work more deserving and no work more for the benefit of humanity than Red Cross work at this time.

THE EDITOR.



GLADIOLUS—RODANO.

One of A. E. Kunderd's new Primulinus Hybrids, described as a soft sulphur yellow. Sometimes has all petals penciled with pink markings. A very attractive and pretty variety.

# My War Garden.

BY CLARENCE WEDGE before Minnesota State Horticultural Society.

IN ORDER to encourage the planting of small war gardens last spring I furnished our county papers with a planting plat that might be used for a garden of 2 square rods, one-eighth of an acre. Its publication aroused so much interest, provoked so many questions and was adopted by so many people, that not being a professional gardener I became somewhat worried lest I had made mistakes and led my followers astray. And so in order to vindicate myself I felt compelled to plant one at home on the same pattern.

The plat is given herewith and is so plain that it speaks for itself. It was not intended as a pattern for large farm gardens where land is plenty and horse cultivation is possible, but rather to encourage town people who have a little idle ground at their back door to plant a garden. My object was to show them how large a supply of vegetables for the family could be grown on a little patch hardly bigger than a large room.

- C—Corn, 136 ears; 1 pkt. Golden Bantam.
- l—Lettuce, 40 heads; 1 pkt. Black Seeded Simpson.
- p—Parsnip, ½ bush.; 1 pkt. Improved Hollow Crown.
- r—Radish, 72 roots; 1 pkt. Early Scarlet Globe.
- c—Carrot, ½ bushel; 1 pkt. Danvers Half Long.
- k—Kohl Rabi, 24 heads; 1 pkt. White Vienna.
- b—Beans, 33 plants; 1 pkt. Stringless Green Pod.
- i—Onions, ½ peck; 1 pint Yellow Bottom Sets.
- .. Peas, ½ bushel; ½ pint Alaska or Gradus.
- T—Tomatoes, 2 bushels; 1 pkt. Chalks Jewell.
- o—E. Cabbage, 24 heads; 1 pkt. Copenhagen Market.
- v—Beets, ¾ bushel; 1 pkt. Detroit Dark Red.
- s—E. Potatoes, 2 bushels; ¼ peck Bliss Triumph.
- M—Cucumbers, 1 bushel; 1 pkt. Imp. Long Green.
- R—Late Cabbage, 4 heads; 1 pkt. Danish Ballhead.

A space of ground 1 rod wide and 2 rods long is required to plant this garden.

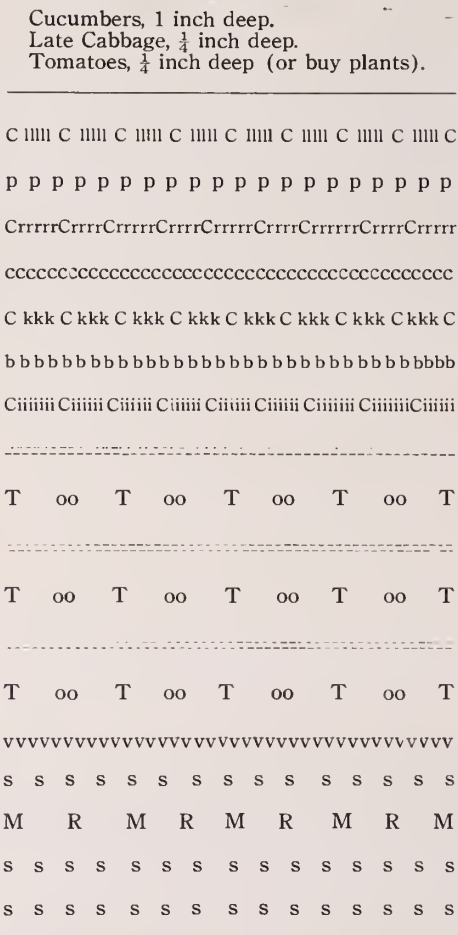
Each above paragraph shows an estimated yield, followed by amount of seed required. The letter at the left of each paragraph is the key to the planting of the different vegetables.

To be sown in April or as soon as possible. May be sown as late as May 15, if not able to do so before.

- Lettuce, ¼ inch deep.
- Parsnip, ¼ inch deep.
- Radish, ¼ inch deep (may be sown any time).
- Carrot, ¼ inch deep.
- Kohl Rabi, ¼ inch deep.
- Onion sets, deep enough to cover bulbs.
- Peas, 2 inches deep.
- Early Cabbage, ¼ inch deep.
- Beets, ½ inch deep.
- Early Potatoes, 3 inch deep. (Cut to one or two eyes).

To be sown May 15, or soon after.

- Sweet Corn, 1 inch deep.
- Beans, 1 inch deep.



Besides this I wished to discover if there might be a real profit in such gardening. There's a common idea that the work may be wholesome and pleasant for those that like it, but that as a business venture it doesn't pay. So I kept a careful record of every minute put into the work and the cost of all seeds, tools and stakes, some of which will be just as useful another year. Harvesting has not been figured in. Any family would be glad to gather fresh vegetables at their back door as they needed them in preference to taking them from the huckster's wagon at the same price. The only tools used were a common hoe and an iron rake. I am a great believer in the rake as a garden tool and did practically all my cultivating with it. The following is the record. It will not only show the amount of time put into the garden, but when and how it was put in. It may also be something of a guide to the beginner as to what to do and when to do it:

Date	Minutes
April 10. Spading garden	60
April 11. Stake out, sow early seeds	120
April 21. Plant potatoes	45
April 30. Plant early cabbage and kohl rabi	30
May 4. Rake all	20
May 12. Rake all	25
May 16. Rake all	20
May 16. Bush peas, plant corn and beans	70

Date	Minutes
May 19. Set tomato plants (first lot)	10
May 24. Rake all, sow cukes	30
May 26. Thin carrots and parsnips	20
May 30. Set 12 extra tomatoes	25
June 2. Thin beets	15
June 5. Rake all	25
June 9. Rake all	20
June 15. Rake all	30
June 19. Plant 1 row of potatoes after peas	15
June 21. Stake and tie tomatoes	60
July 9. Rake, pull peas, make trellis for cukes	100
July 10. Tie cukes	10
July 14. Tie tomatoes	50
July 19. Tie cukes	10
July 19. Tie tomatoes	25
July 28. Tie tomatoes	15
Aug. 6. Tie cukes	20
Aug. 15. Tie tomatoes	60
Aug. 15. Rake	10
<b>Total labor (15½ hrs.)</b>	<b>940</b>

### COST OF GARDEN.

Labor 15½ hrs. at 30c.	\$4.70
Two loads manure at \$1.00	2.00
Seeds	1.00
Hoe and rake	1.60
27 (2x2—6 ft.) tomato stakes	2.00
<b>Total cost</b>	<b>\$11.30</b>

I certainly had my share of troubles. Some "varmint," perhaps a woodchuck, took nearly all the beans as fast as they formed. The only beans I managed to get were set after the bushes had grown beyond the reach of the enemy. My late cabbages simply refused to make heads, and the cucumbers were attacked by some of Prof. Washburn's creatures that riddled the roots and stems at the surface of the ground. So that three of my crops were failures. I tried to offset these reverses by planting potatoes as a second crop after the double row of peas, between the row of tomatoes and corn, but the short, severe drouth of August spoiled the plan, and as much as I would have liked to have used a little irrigation at that time I refused to do so, wishing to have the experiment go on in a way within the reach of everybody. After the garden was planted I decided to nearly double the number of tomato plants by putting out one between each plant indicated, and to tie them to stakes. It will be seen that the cost of stakes and the time spent in tying them makes up a pretty large share of the cost of the garden. But the quantity and quality of the fruit I think fully justified the cost, especially in such a cold season, when the plants needed all possible exposure to the sun. In spite of all my reverses the following carefully measured products were harvested from the two square rods:

Product.	Value.
115 Radishes	\$0.70
1 bu. (8 lbs.) lettuce	1.00
21 heads Kohl Rabi	.70
1 bu. Peas	2.56
22 heads E. Cabbage	1.65
6 qts. String Beans	.48
139 ears Sweet Corn	1.73
118 lbs. Potatoes	1.96
2 lbs. Cukes	.30
4½ bu. Ripe Tomatoes	9.00
½ bu. Green Tomatoes	.25
44½ lbs. Beets	1.33
26½ lbs. Parsnips	1.30

Product	Value.
25½ lbs. Carrots	.75
Total product	\$23.71
Less cost	11.30
Net profit	\$12.41

I don't know much about the value of vegetables, so I asked one of the leading market gardeners of our town to set down the value of each item on the basis of the prices made to his customers during the past season. The figures are his, and I think that they will appear right to those of you who buy throughout the summer.

This leaves a balance in favor of the garden of \$12.41, after charging it up

with my time at thirty cents per hour and all other expenses including \$3.60 for tools and stakes on hand for next year. No irrigation or any unusual methods were employed. If there is any secret in my success it is in the unusual amount of manure used, two wagon loads. But in most towns, this is still a waste product, and in the larger towns street sweepings, one of the most valuable of all, can be had for the hauling. There is certainly magic in it when applied in liberal quantity and well mixed with the soil. Rake cultivation as soon as the ground dried after each rain, was another important matter. A wholesome twenty-minute-

before-breakfast exercise preventing the weeds from ever showing their heads and keeping the ground so mellow that most of the season I could thrust my hand down to the wrist in the soil.

I have had a family garden all my life and always used a good deal of manure and elbow grease, but this little experience with a surplus of both has revealed to me as never before the possibilities of heavily manured, well tilled soil. The size of the garden is not what counts so much. If you lack ground put on more manure and more elbow grease. Give them both a trial next summer.



A hardy, free-flowering shrub well adapted to planting in borders and for screening unsightly fences, outbuildings, etc. Known to botanists as *Sambucus Canadensis*; to everybody else as common Elder.

(From Wisconsin Horticulture, published by Wisconsin State Horticultural Society, Madison.)

### Planting Sweet Peas.

Several years ago I read somewhere about a certain successful gardener who told the secret of his ability to secure a very abundant yield of garden peas every year. His method was to dig a deep trench, make the bottom of it very fine and fill in several inches of old, rotten manure, the older and blacker the better; then plant the pea seeds *directly on the top of the manure* and cover with a couple of inches of fine soil and firm well. It was with some misgivings that I ventured to test

the method, but I was agreeably rewarded with an unusually large crop of peas, and the next year I tried it out on the sweet peas also, and found that it gave fully as good results. From several years' experience I am convinced of its value, and can recommend it highly.

There are several important rules to be remembered in growing sweet peas that, unheeded, may cause failure whatever the method followed.

Plant very early. It is highly important that they be planted as soon as the ground can be worked in the spring,

or better still, late in the previous fall.

Don't plant in the same soil successively, and don't plant in poor soil and expect a good crop.

Don't plant too thickly. For or five inches apart is close enough. The vines will then be heavier and more productive.

Keep well watered in dry weather. Cut the blooms every day or two and do not allow any to go to seed if you want them to continue flowering.

H. G. READING.

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

### Gladioli in the War Garden.

"SO MANY WHO have been accustomed to growing flowers are now giving them up for more important things." The speaker was a sweet-faced matron who tried to hide her heartache as she talked of the telegram of her son's slight indisposition at camp —, and of her Wednesdays at the Red Cross room, of her knitting at home, her conservation of food and of various self-denials, all to help, and then, with a smile, of the hoped for furlough.

But I saw what she did not know, that worry and hurry and anxiety were placing their stamp on her countenance. And I wondered if the keen eyes of the son, if he be granted the furlough, would notice the change, slight as it was, and if it would take the soldier heart out of him.

She is not a flower or garden enthusiast but enjoys flowers and usually has them on her table and in her garden, but now, like many others, in patriotic zeal is depriving herself of their soothing influence in the belief that they are not a necessity. But her soldier having been accustomed to them, associates flowers and vines and gardening with the cheering brightness of the home picture. Doesn't she need flowers for him, and for herself in the relaxation that work among them would bring?

Guy Empey and his soldier companions made a wreath of grass to place on the grave of a comrade. How they must have wanted flowers!

Lieutenant Coningsby Dawson in his story, "The Glory of The Trenches," in describing the welcome of the wounded soldiers on their return to "Blighty," says: "Flower girls are here with their baskets full of flowers — just poor girls with a living to earn. They run after us as we pass, and strew us with Roses. Roses! We stretch out our hands, pressing them to our lips. How long is it since we held Roses in our hands? How did these girls of the London streets know that above all things we longed for flowers? It was worth it, all the mud and stench and beastliness when it was to this that the road led back."

How plain it is that we need flowers, more flowers than ever before, and the wholesome work of growing them ourselves. Last year the necessity for food conservation caused multitudes of people who had never gardened before to grow vegetables. The satisfaction of producing garden products and the beneficial exercise made it doubly interesting. Gardening became contagious and this year added millions will become soldiers of the soil. Think of the beauty if there were only one flower grown in each garden, and with just a little more time, a little more thought, a little more work a row of



flowers may be had the entire length of the garden.

Some flowers will adapt themselves quicker to various soils and conditions than others. The Gladiolus is a leading one in that respect and will do well in any good soil prepared as for vegetables. That beauty row must be straight. When soil is well worked and ready for planting, fasten a garden line to a stake and drive it into the ground at one end of the garden and place a corresponding stake in the ground at the opposite end. Draw the line taut and to make sure of having it straight better place a third stake in middle and take a sight over it from the end. With an iron garden rake smooth out the soil under the line and with the corner of the hoe make a drill beside it the entire length. If the bulbs are large, say 1½ in. in diameter and the ground sandy, the trench should be six inches in depth and two in width at the bottom, but with a heavier soil four inches will be deep enough. A well manured soil will not need enriching but for ordinary garden ground it would be better to add a little good fertilizer such as is used for potatoes. A couple of tablespoonfuls scattered in the width of the bottom and about 2 ft. long will be about right. Mix it with dirt and sprinkle about an inch of soft dirt over it before putting in the bulbs for they must not come in direct contact with the fertilizer.

By making the drill wider more bulbs can be planted at a great economy of space thus . . . . . One of the rules in planting is to allow each bulb twice its diameter for growing room but they will do well with a little less. If planted early and ground is cold it is well to not cover more than level at first, allowing for warmth from the sun, but as weather warms they should be ridged. Cultural directions in this respect will be given next month.

Perhaps you grew a few Gladioli last year and have some bulblets. They are the small growth at the base of the bulbs. And now I hear some beginner say: "Are those little things worth anything? I didn't save mine." Well, large blooming size bulbs may be purchased so reasonably now that it hardly pays to save the bulblets unless you are planning to go into the business commercially. But if you did save them and are interested in their growth, you should plant them as early as possible while the soil is full of moisture for the covering or shell is rather tough especially if it has been allowed to become dry through the winter, and they will be slow in coming into growth. These may be planted in a row by themselves but if space is limited they can be put in odds and ends of places. There is nearly always a little space left unplanted at the ends of the vegetable rows and a handful of bulblets

can easily be grown there. Drop them in about three or four inches deep if soil is sandy and about one-half as deep if clay. Plant them very thickly.

There are many places where a few bulbs may be tucked in the garden. Plant a row beside the early beets, such as Burpee's Extra Early which are ready for table use in six to eight weeks time and when pulled the Gladioli will be growing nicely in the row.

As radishes, head lettuce and anything that is used early are taken out the vacant space may have a bulb or two dropped in. Many florists keep a supply of bulbs to fill spaces among Carnations or other plants. Bulbs to be planted late in the garden must be kept in a cool, airy place where they will not sprout, and planted not later than the middle or latter part of June. Such bulbs should be one and one-half inches or over in diameter as large bulbs come into bloom earlier than small ones. Small bulbs planted earlier will bloom nicely before fall frosts.

MRS. A. H. AUSTIN.

### The Editor's Three P's.

We unfortunates who live in cities where the raising of pigs is taboo, can only regret our inability to follow the advice and example of the editor, and raise a pig for our country's sake and the great cause for which we are at war. We can, however, do our bit by conserving the pig that the other fellow raises, and on all occasions voice the patriotism.

And then, let's not neglect the posies, even if we have to set the alarm clock an hour earlier. Though we feel strongly that it is our patriotic duty to see that our fields and gardens give maximum returns in food production this year, there should and can be found time and opportunity for the additional planting of some fruits and flowers—especially perennials. Double, if possible, the vegetable output of last year's garden, but let sanity prevail, and try to obtain room elsewhere before destroying valuable perennials that may seem to be taking up needed space.

In one of his recent articles, the talented writer, Mr. J. Horace McFarland, while urging a more liberal planting of Roses for this year throughout the country, says:

"My desire for this planting is greater because of the war conditions that have caused every mother's heart in America to throb and some to know bitter grief. There is a solace, a restoration of balance, a grief antidote, to be found in the sight of a beautiful Rose, which I would have made available all over the land. We call upon flowers to aid in expressing our sympathy for the dead; why not use them more freely for comforting the living who have heavy burdens to bear? Last spring a high official in the Federal Government, in the first hysterics of the potato shortage, proposed that the great gardens of Iris, Peonies and Roses in the Arlington farm of the Agricultural Department at Washington should be plowed up and potatoes planted instead! Saner counsels prevailed; but I am expecting to send a peck of potatoes as a funeral tribute should that man soon pass away." H. G. R.



## “Gladiolus Studies I. Botany, History and Evolution of the Gladiolus.”

BY ALVIN C. BEAL.

A Review by S. E. SPENCER.

[Written expressly for The Flower Grower.]

IN ADDITION to the valuable pamphlet on “The Hard Rot Disease of the Gladiolus,” reviewed in the February number, the New York State College of Agriculture has issued three Extension Bulletins, numbered 9, 10 and 11, which will be a welcome addition to the literature of floriculture and of great value to all who grow Gladioli. As these pamphlets are for free distribution only in New York State the editor of THE FLOWER GROWER has asked me to give our readers a general idea of their contents.

There is an element in human nature which causes us to search for the beginnings of things, and this fancy is fully satisfied in Bulletin No. 9, which gives us a very complete and interesting history of the beginnings of Gladiolus culture.

Those who imagine the Gladiolus is a product of the modern flower garden will be surprised to learn that “There is no definite record of the time when the plant came into cultivation. It is not improbable that the Greeks and Romans used the flowers of native species gathered from their grain fields in their floral decorations.” Dioscorides writes of a purple flowered Gladiolus (probably *G. Communis*) and Atheneus says Gladioli were planted on the graves of virgins.

On pages 122 and 123 are six illustrations of “Garden Gladioli of Three Centuries Ago,” as illustrated in colors by Besler in 1613. Two of these show wide open blossoms and three have lily shaped drooping flowers with very little resemblance to modern Gladioli.

The botanical history of the Gladiolus begins with the mention of two species by John Gerarde, 1597, in “The herball or generall historie of plants.” These were *Gladiolus Narbonensis*, French corn flag, flowers purple and arranged on both sides of the stalk, and *Gladiolus Italicus*, Italian corn flag, flowers purple, similar in form to the preceding but arranged on one side of the stalk.

And in describing these species Gerarde writes: “These kinds of corne flags growe in meadowes and earable grounds among corne in many places in Italy as also in the parts of France bordering thereunto. Neither are the fields of Austria and Moravia without them as Cordus writeth. We have great plentie of them in our London gardens, especially for the garnishing and decking them up with their seemely flowers.”

Bradley (1728) mentions six species, Linnaeus in 1737, describes sixteen, and John Bellenden Gawler in 1805 listed twenty-eight.

John Gilbert Barker in 1878 published *Systema Iridacearum*. In 1892 his “Handbook of the Iridæ,” describes

132 species. And so the list has grown until we have the one compiled by the author, covering seven pages, giving habitat, date of introduction, height in inches, number of flowers and coloring of 183 species. A detailed description is given of twenty-two of these which were used in the development of the modern Gladiolus. Many of them are still listed in the catalogs of European dealers.

Fifteen species are found in Europe, Asia and Persia, practically all the others in Africa, and it is interesting to note that almost one hundred years ago Hon. William Herbert, Dean of Manchester, wrote a prophesy which has been amply fulfilled in our time: “I am persuaded that the African Gladioli will become great favorites with florists when their beauty in the open border, the facility of their culture and the endless variety which may be produced from seed by blending the several species are fully known.”

In the Journal of the Horticultural Society of London (1847) he records what was probably the first attempt to hybridize Gladioli:

“Forty years ago I first crossed the large and brilliant scarlet and white *Gladiolus Cardinalis* with the smaller but more freely flowering *G. Blandus* which sports with white purple and rose coloured flowers. The result was a fertile breed of great beauty of which the prevailing colour was purplish roseate.”

Just one hundred years ago he reported to the same society:

“Having raised two beautiful and hardy species (?) of Gladioli by impregnating *Cardinalis* with *Blandus* and *Blandus* with *Cardinalis* \* \* \* These two new species of Gladiolus which have flowered make seed freely. I have also mules from *Gladiolus Tristis* impregnated from the large flowered blue *Gladiolus Recurvus*.”

But none of these “mules” were of any commercial value. It was Colville’s seedling raised in 1823 at Chelsea, England, which became the first of a valuable race, still extensively grown under glass in this country, and *G. Ramosus* a seedling of *G. Blandus*, introduced in England about 1835 which added more desirable seedlings, flowering later than the Colvillei.

The introduction of the famous *Gandavensis* in 1840 was “the real starting point of the modern garden Gladioli.” To M. Beddinghaus, gardener to Duc d’Aremberg, belongs the honor of producing this important seedling, a cross between *Psittacinus* and *Cardinalis*, so it was announced at the time, but the parentage was questioned by Dean Herbert, and our author inclines to the belief that *Psittacinus* and *Oppositiflorus* were the parents. This

valuable hybrid was purchased and introduced by Louis van Houtte and “created a furor in the Gladiolus world.”

It does not appear that any of the seedlings of those days have survived except the famous *Brenchleyensis*, produced by Mr. Hooker, of Brenchley, about 1846, and still very much in evidence after seventy years of commercial life.

M. Eugene Souchet, gardener for Napoleon III, was the most famous breeder of Gladioli of his time and an interesting story is told in connection with the visit of Queen Victoria in August, 1855. When the Queen inspected the royal gardens at Fontainebleau the flower borders were decorated with cut spikes of Gladioli set in vases among the plants. How this resulted in the greatly increased popularity of the flower in England is explained by an unknown writer of the time:

“Few flowers have made in so short a space of time such rapid progress in public favor as the Gladiolus \* \* \* \* the French were beginning to draw our attention to the bulbs and new varieties were reaching us from the other side when our gracious Sovereign gave a great impulse to their culture by taking them under her special patronage. Their being placed on the royal table led the frequenters of the court to follow the example set them and a demand almost unprecedented in the history of flowers has arisen.”

Victor Lemoine of France, who died about five years ago, developed a number of seedlings from the purpleo-auratus which are now known as Lemoinei.

Herr Lechtlin produced *G. Lechtlinii* by crossing *Gandavensis* with *Saundersii*. This strain was brought to America, renamed *G. Childsii* and became at once deservedly popular.

*Gladiolus Primulinus*, a clear yellow which has been of greatest value to breeders was discovered by J. F. Last in 1887, and flowered at Kew, 1890.

The author says this was introduced by Sir John Kirk in 1884 as *G. Quartini-anus*, but everybody knows it now as *Primulinus*. Thorburn introduced it in this country in 1908, and the story of its great popularity and the beautiful seedlings produced by crossing and recrossing with our best garden varieties is familiar to all.

There is an interesting chapter on the “History of Gladioli in America.” The printed record begins with McMahon’s “Gladioluses” in 1806. Breck, Thorburn, Landreth and Hovey cataloged them in their early editions at 12 cents to 50 cents each. E. S. Rand, Jr., of the Massachusetts Horticultural

(Concluded on page 47.)

## The Flower Grower

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No. 4

"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### A Patriotic Glad Idea.

As my "better half" was returning from Chicago yesterday a little girl, who said she would be "three years old the day after the Fourth of July, if there is a Fourth of July this year," came over beside her chair. Noticing the knitting bag lying on the suitcase, she asked: "Is that your bag?" Being told it was, she next inquired: "Do you knit for soldiers?" "Yes, dear," was the reply. Then came the question: "Why aren't you knitting now?" and the innocent words of the child, without intent to rebuke, seemed to carry the sense of a call to duty.

She is "knitting now," as she sits beside the window where hangs our service flag, with two stars in its field for our Boys who enlisted in Aviation Service, and looks up to inquire: "Why don't you tell THE FLOWER GROWER how the Gladioli helped us do our bit last summer? The idea might help others." And I feel that I have been neglecting my "knitting" for I should have told you about it long ago. But it is not too late.

It all began when I gave her an armful of Gladiolus blooms one afternoon as she was starting for the Country Club, where lady visitors from a neighboring city were being entertained at luncheon. After the flowers had served their original purpose of adorning the tables, admirers sought to buy them. Then came "the idea." Why not let them be sold for the benefit of the Red Cross? And so it was done, and again the next week, and the next, and so on through the season.

Before long came the Annual Vaudeville and Ball of that organization, at the Edgewater Beach Club House. Here the idea was further developed, for she made a number of corsage bouquets from the half-bloomed-out tips from the garden; harmonious colors combined, exquisite as orchids, a bit of green added, stems wrapped in florists' foil; and I cut a quantity of choice spikes and set up an attractive display. All sold readily and brought more than market values as all receipts of the evening went to the Red Cross and the price was "left to your own generosity, Sir!" Even my spikes of *Purple Glory* brought more than their cost, from a visiting opera singer.

Then came a Labor Day celebration, with a "Street

Dance" at night on the Lake Boulevard for the benefit of the "Yarn Fund" and here the sale of corsage bouquets by the ladies again helped in the knitting.

And then when the "Boys" marched away to camp and the great demonstration in their honor was concluded by a dance in the pavilion at Silver Beach, down on old Lake Michigan's shore, another large lot of bouquets found ready sale for the good of the cause.

Nor did the idea stop when blooms were gone, for a number of boxes were filled with good bulbs and placed on sale, the proceeds going to the Red Cross.

I produced the "Glads," my wife produced the idea, and together they produced over a hundred dollars for the Cause of Humanity.

Friends who grow Gladioli—the time of bulb sales is here, the time of flowers will soon come, the needs will be even greater than before—don't forget your knitting! "Get 'the idea'?" There is no copyright on it; we hope others will use it; we hope it may be developed and expanded by others who will relate their accomplishments and show us how to do even more.

C. R. HINKLE.

### Join The American Gladiolus Society.

I am sure that every one who has become even the least bit interested in the Gladiolus is anxious to know more about it. I well recollect how earnestly I sought for cultural knowledge when I began growing Gladioli years ago, but I had to learn from experience, and sometimes it was expensive. I once lost an entire season's crop of bulblets through ignorance. There were no Gladiolus societies at that time, but we have a national one now that is offering its services to you, even waiving the initiation fee (\$1) if you join before June 1st. It is a wonderful opportunity to learn everything about the Gladiolus and its culture. The membership fee is \$2.00 per year and includes a year's subscription to THE FLOWER GROWER. I am on the membership committee and want to help every one I can. Drop me a card and I will send you a printed slip by return mail that will explain all about it, and make it easier for you to join.

MRS. A. H. AUSTIN, Ravenna, Ohio.

One of our subscribers has written stating that some growers when filling orders put in a bulb or two of different varieties for trial. This subscriber says that it would be much more satisfactory to the purchaser if the seller wanted to send something gratis to put in extras of the same varieties ordered, preferably in small stock or planting stock.

The sending out of a bulb or two of varieties for trial is somewhat of a nuisance to the recipient at times. Many growers who have a large number of varieties and few of a kind are not very anxious to add to the number of varieties by the choosing of someone else, and in such cases the sending of only a bulb or two is not much of a kindness.

One of our esteemed subscribers, who is located near the base hospital at Camp Custer, Mich., states that he will take his surplus bloom this summer to the sick soldier boys. Surely this is most commendable. Flowers have an influence for good and for refinement on people who really pay little or no attention to them and in the sick room they are especially valuable as they help to cheer the lonely hours.

Flowers in war time are more valuable than at any other time and instead of neglecting flowers we should grow more of them and see that they reach people who will be most benefited by them. The example cited above is an ideal way to dispose of surplus bloom.

## The Glad Philosopher's Musings.

Cherish ever the friendship of a true friend. Without true friends we would be miserable mortals indeed. True friends are unfailing in their ministrations. True friends protect us from our enemies, and never turn against us to do us any harm. The birds, the toads, and even the unfortunate garter snakes, measure up to the requirements as true friends of the gardener and his garden.

In the Glad Philosopher's circle of personal acquaintances are several families who spend their winters in the south, arriving back in the spring as soon as the weather here has become agreeable. Of course, I am always happy to greet them again after their long absence. And I have other friends who likewise go south to spend their winters and they also return in early spring, and their coming, too, I always anticipate with gladness. I refer to the unfailing bluebirds. Although I love all birds, no one is quite so dear to my heart as the bluebird.

"Winged lute that we call a bluebird,  
You blend in a silvery strain  
The sound of the laughing waters,  
The patter of spring's sweet rain,  
The voice of the winds, the sunshine,  
And fragrance of blossoming things,  
Ah! You are an April poem,  
That God has dowered with wings."

—(*The Bluebird*—Rexford.)

The bluebirds are about the easiest attracted to nesting boxes of any of our insectivorous birds. They like to build in the hollow cavities of posts or trees, and a hollow apple tree in the orchard is a favorite nesting site. If bluebird houses are made inconspicuous by being built of old weather-beaten lumber, or painted a dull color, "camouflaged," as it were, they should not fail to attract tenants. I make my boxes about ten inches high and six inches square at the top and bottom; the openings are either two inches square, or two and a half inches in diameter when made round, and without perch or threshold. The sparrows are not so likely to bother them if they are built without thresholds. Bluebird boxes should be fastened from 8 to 14 feet above the ground, with the opening facing the opposite direction from which the storms usually come. In these boxes they usually rear two broods in one season.

Insects furnish three-fourths of the food of the bluebird, and beetles, grubs, caterpillars and grasshoppers comprise its favorite menu. The bluebird is, therefore, proven to be one of the gardener's best friends, and as with all other true friends, his friendship should be cherished.

The uncouth and homely hop-toad evidences the truth of the principle

that a true friend may have a rough exterior. Both the toad and the garter-snake have been ungratefully treated for ages and grossly misunderstood; each is absolutely harmless and highly beneficial; they also deserve a place amongst the gardener's true friends, and the erroneous prejudice that has caused them to be shunned or destroyed should give place to sensible appreciation and protection.

"Your scribe," as the country correspondent in his communication to the county paper would say, commends our editor's appeal for patriotism, posies and pigs.

Speaking of pigs, it may surprise some to learn that the pig is considered the most intelligent of all our farm animals. It can be trained to point game like a pointer dog, and also to track game like a beagle. Educated pigs in circuses do stunts that are amazing and seem to evidence a certain amount of reasoning power. In France the pig is trained to locate truffles deep in the ground by its keen sense of smell and to root them out, when they are collected and sold. Holy Writ records that our Savior once drove a legion of devils into a herd of swine, and anyone who has ever tried to get an escaped pig back into its pen can testify to the craftiness and diabolical cunning a pig can display when it stubbornly refuses to obey commands.

"The pen is mightier than the sword," Earl Edward Bulwer-Lytton wrote; But 'twas the quill Earl Edward meant, and not a pen to house a shoat. Using both kinds of pens, our editor will be doubly instrumental in helping win the war, and so his name should be added to the honor roll of those whom the pig has made famous. And there is already a goodly list of such besides Dold, Swift and Armour. You have all heard of Ham, Bacon, Swineburne and Gov. Hogg of Texas?

THE GLAD PHILOSOPHER.

## Gardening in War Times.

For those of us who must remain at home, it is a duty to those others that we live sane and calm lives, that we may be able at every opportunity to render the fullest measure of service to our boys at the front. Calmness and sanity are products of natural living. To be effective in troublous times means that we must hold to those things of life which bring contentment and restoration of spirit.

The Maker placed Adam and Eve in a garden. Presumably it was His intention that a garden should furnish the greatest happiness and the loveliest surroundings in this life.

We who love gardens have reason to be thankful. Gardening is relaxation. The refining and soothing effects of digging in a garden are the more keenly to be appreciated in war times because of the comparison such work affords to the echoes of the cannon and the strife of war. Nature's wholesome breath is like a benediction.

We who make gardening our hobby are glad of the broadened appreciation of our hobby brought about by the Government urging the people to plant gardens. We are

proud, too, because of the happiness and contentment our new found co-workers have discovered in growing things. Because our brothers are "over there" is no reason why we should expect the sun to stop shining, the beauties of Nature to cease, nor the songs of birds to be stilled.

Flower gardening is just as necessary in these war times as vegetable gardening. Flowers are food for the soul, stabilizers of the emotions. More than ever do we need these things now—these signs of the Maker's goodness and love.

All of which leads up to the thought that it is correct and proper to plant flowers and grow beautiful things. God intended that flowers should give us cheerfulness. Was there ever a time when cheerfulness was more needed than in these days when so much is happening to unsettle our thoughts? Grow flowers! Grow more flowers! Grow still more flowers! Preach the gospel of beauty and naturalness to all about you! Allow your friends, allow your fellow men, allow even your enemies to enjoy your flowers and all will be drawn nearer to each other and to the Creator.

Gardening for flowers, for beauty, for naturalness, will never be listed as a non-essential in the lives of the American people. It is as necessary a feature of wholesome lives as good fresh air and sunshine.—JOSEPH J. LANE in *Garden Magazine*.



Divided flower spike of the variety, *Evelyn Kirtland*. Can anyone tell the cause of this? This variety is an unusually strong grower and this may perhaps account for the freak growth. Photograph furnished by Jno. J. Prouty, Baldwinsville, N. Y.

This issue of THE FLOWER GROWER contains two suggestions showing how flower growers may serve a patriotic purpose by helping the Red Cross. What is more appropriate than flowers in war time and what is more appropriate than their sale for Red Cross purposes? Any further suggestions will be gladly received and we will be pleased to give publicity to good ideas along this line.

## THE DAHLIA.

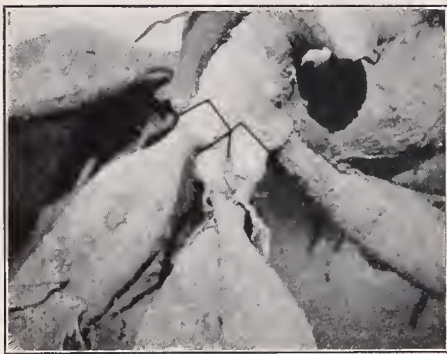
### Preparing and Planting Dahlia Bulbs.

By J. K. ALEXANDER.

[Written expressly for *The Flower Grower*.]

Incredible as it may seem I have heard not once but a dozen times of amateur Dahlia growers planting an entire field-grown clump of Dahlia roots in one hill; and, of course, whenever this happened the complaint that reached this office about the unsatisfactory results in growing Dahlias was swift and long drawn out.

Dahlia clumps should be divided at planting time in the spring; first, because the roots keep better through the winter in clump form, and second because by spring the eyes will have in all probability made the beginnings of a sprout, which greatly simplifies matters when it comes to separating. If the eyes have not started and you are in doubt as to being able to detect them, place the clumps in a warm place and moisten them slightly. In a few days the eyes will be readily discernible.



Dahlia Clump, Showing Proper Method of Dividing.

Perhaps the simplest and most satisfactory way to divide the clumps is to first cut completely in halves, taking care to have the eyes as nearly as possible evenly distributed between the two portions. Then separate each bulb so that a portion of the crown will be left on each one. Great care should be taken in this operation, for as the crown is the only part of the root that throws out sprouts, a bulb that has no crown is, of course, worthless. A glance at the illustration will show clearly the proper method of separating the individual bulbs.

I might add right here, that the size of the bulb in no way determines the size or quality of the blooms. In fact I prefer a small or medium sized bulb to a large one for as a rule the large, overgrown bulbs are the last year's planting from which the new bulbs have grown; while if planted it will make a good, strong plant with good blooms the new growth of bulbs will be very unsatisfactory. I have dug hundreds of these large, old bulbs that

have not produced a single new tuber; and recognizing this fact many growers make a regular practice when dividing their clumps of cutting out this old bulb and throwing it away as worthless.

The bulb should be planted six inches deep and placed flat in the furrow; not on end nor at any angle. I have noticed many times that six inches by rule and six inches by guesswork are apparently two very different dimensions. There is something deceiving to the eye about the depth of a hole in the ground. For instance, if you live in the country and have a well ask any inexperienced visitor to name the depth of it. If it is fifteen feet he will guess twenty-five every time. It is the same with plowing; eight inch plowing more often than not turns out to be about six inches when a two foot rule is placed in the furrow. So when planting your Dahlias make sure that you plant them six inches deep. With this depth and with proper cultivation it will be a very severe drought indeed that will have any serious effect upon them; and furthermore, nothing short of a hurricane will blow them over.

The time of planting is the time to decide what method of training you will pursue. There are three systems from which to choose: Staking, branching and massing. For all purposes except the growing of exhibition flowers I unhesitatingly recommend the last named.

When using the staking system the bulbs should be planted about three feet apart in the rows, and the stakes should be set when the Dahlia is planted. As soon as the plants attain a height of about two feet they should be secured to the stake firmly. By this system each individual plant has ample room and opportunity to expand, and there is very little danger of their getting blown over or broken. Also for trimming, disbudding, etc., this system is ideal and is the one always adopted for the growing of exhibition stock.

For the branching system, plant in hills from 18 to 30 inches apart. When the plant has two sets of leaves, that is four leaves in all, pinch or cut off the entire top of the plant above the upper set of leaves. At each leaf a branch will start, making four branches, one for each leaf. When the plant is fully grown it will have a short, strong, single stalk which comes only an inch or two above the ground, and four main branches or flowering stalks. The plant will be low with a neat, branching appearance and the strong branches close to the ground will make it self supporting. This system retards the flowering of the plant about two weeks, but the four flower stalks will produce many more blooms than the original single stalk plant.

The massing system is the one I use in planting my immense fields. It avoids the extra labor and expense of

staking, the woody effect of stakes in your garden and gives a solid mass of foliage and flowers which is much more beautiful and effective than where the beauty is broken by the stakes and necessary spacing. When the plants are in full bloom nothing is equal to the massing system. The bulbs are planted in rows from ten inches to one foot apart in the rows and when grown will be found self-supporting, each plant protecting and supporting its neighbor.

This system requires, of course, more tubers for a given space; but I think that with only a few bulbs at his command a grower will make no mistake in adopting the massing system. Use what bulbs you have, and if there is space left over plant something else, or better still buy extra bulbs.

### The American Gladiolus Society.

#### MEMBERSHIP CAMPAIGN.

TO THE EDITOR:—

It may interest you to know that B. H. Tracy has ordered and agreed to mail, entirely at his own expense, 2,000 copies of the Membership Blank of the American Gladiolus Society with his name imprinted thereon, and Jelle Roos, of the Central Gladiolus Gardens, Milton, Mass., has agreed on the same basis to take 2,500 copies. John Scheepers & Company, of 2 Stone Street, New York City, has agreed to take 250.

The splendid spirit manifested by these people is an indication of the confidence reposed in us and our campaign, and gives us great encouragement and satisfaction. I hope that other firms throughout the country may come forward to join in the work. The cost of these circulars is very slight, and they are very light in weight.

I am undertaking to mail out 25 of these blanks to each of the Secretaries of the Garden Clubs affiliated with the Garden Clubs of America. Anybody having any suggestions for the further activities of the Membership Committee are cordially invited to make the same known.

The Membership Committee actually comprises every person who has an interest in the Gladiolus Society. The names published in the Roster of the Committee, are but a suggestion of the actual membership committee.

JOSEPH J. LANE,  
Chairman Membership Committee.

Don't forget to grow some seedlings this year. Most Gladiolus growers save some seed each year and it can be had by applying to our advertisers. Seedlings are extraordinarily interesting and have great possibilities.

The war garden described on page 38 of this issue has stood the test of actual experience, and it is not based on somebody's guess-so or theory, but on the actual results of what was done last year. Such things we are always pleased to publish.

## WAYSIDE RAMBLINGS

### BLUE GLADIOLI.

In one of the last FLOWER GROWERS I read something about Blue Gladioli.

I have a fine collection of these Gladioli, having made a specialty of this color in the last few years. I received for my blue Gladioli the following prizes:

Bronze medal at Leiden in 1912.  
Silver medal at London in 1912.  
Bronze medal at Hillegom in 1913.  
Bronze medal at Ghent in 1913.  
Golden medal at Haarlem in 1917.  
Award of merit for *Badenia* at Haarlem in 1912.

First class certificate for *Baron Hulot* at Haarlem in 1912.

Award of merit for *King of the Blues* at London in 1913.

Award of Merit for *Rosa Lindt* at Haarlem in 1913.

Award of Merit for *Rev. Ewbank* at Haarlem in 1915.

Award of Merit for *Muriel* at Haarlem in 1915.

Award of Merit for *King of the Blues* at Haarlem in 1916.

Trial ground certificate for *Mr. Mark* in 1917.

Trial ground certificate for *Nora* in 1917.

Trial ground certificate for *Master Wielse* in 1916.

Award of Merit for *Master Wielse* in 1916.

Award of Merit for *Rosa Lindt* in 1913.

Following sorts were, until now, cultivated by me:

*Adeline Patti*, dark violet.

*Ali*, blue, white and yellow spot. (Small stock, new.)

*Badenia*, light blue, violet striped, distinct color. First class certificate.

*Blue Jay*, dark blue, yellow spot.

*Baron Joseph Hulot*, deep violet blue. The old best dark blue. First class certificate.

*Catharina*, light blue with dark blotch.

*Conspicuous*, light blue, dark blue spotted, yellow centre.

*Corri*, light blue, white spot, fine flower.

*Hubertus*, extra fine lilac blue, long stem. The best cheaper sort in the trade.

*King of the Blues*, extra fine new dark blue sort. Award of Merit, Haarlem and London.

*Mr. Mark*, beautiful lilac with dark blotch, strong grower. Trial ground certificate Haarlem.

*Muriel*, fine light blue. Awards of Merit, Haarlem and London.

*Mystery*, light white blue with darker centre.

*Nora*, light blue, extra fine sort. Award of Merit and Trial ground certificate at Haarlem.

*Rev. Ewbank*, fine light blue. Early. Award of Merit at Haarlem.

*Senator Voillant*, good dark blue.

*Viola*, white blue with deep blue spot.

*Wm. Copland*, light blue. Older sort.

Further in purple:

*Distinction*, extra strong grower. Dark color, long stem.

*Lord Balfour*, dark purple violet.

*Master Wielse*, fine violet. Extra cut flower. Award of Merit and Trial ground certificate at Haarlem.

*Master Wiebertus*, light mauve color.

*Rosa Lindt*, purple violet.

So you see there are many blue Gladioli, among which there are plenty of the best colors and strong growers.

K. VELTHUYS.

### ORIGIN OF GLADIOLUS VARIETIES— SYNONYMOUS NAMES.

Answer to Mr. Stalnaker's desire to know the origin of Tracy's *Mrs. James Lancashire*. The originator was Stewart who exhibited it in 1909 as *Fairy Queen*, changing it in 1913 to *Fairy Rouge Torch*, introduced by Tracy in 1914, was originated by Groff. *Maize*, named by Tracy, was originated by Umpleby (No. 5.) Tracy's *Madam Butterfly* was originated by Groff. Cowee's *Rosella* has been sold under the name of *Kathryn*; Cowee's *Scarsdale* has sold as *Cedar Acres Mauve*. *Princess Sanderson*, of Tracy's catalog, is Cowee's *Snoubank*. Mr. Stalnaker says that *Grenadier* and *Mrs. Scott Durand* are identical, but the true varieties of these are quite different. Both are from Coblenz. *Grenadier*, however, is identical with *Velvet King*, *Emma*, *Sidney Grant*, *Wm. Mason* and *Richmond Red*. *Mrs. W. E. Fryer* and *Red Canna* are identical. Cowee's *Meadowvale* has been sold under the names of *Purity* and *Canada*. *Hollandia* has sold as *Mikado*, *Alice Roosevelt* and *Yellow Brenchleyensis*. Stewart catalogued Lemoine's *Lacordaire* as *Empire*. Groff's *Evaline* synonyms are *Smoky Velvet*, *Large Purplish* and *John Schmelzer*. Kunderd's *Gaiety* has been called *Bird of Paradise* and *Pigeon*. Cowee's *Taconic* has sold under *Perfection*, *Gertrude* and *George Betscher*. *Reine de L'Anjou*, *Reine Blanche*, *Le Radium*, *Jeanne d'Arc* and *White Excelsior* are identical. The authority for all the above synonyms is Alfred C. Hottes (Cornell Bulletin, 11). *Polar Star* and *Deiner's White* are also identical.

C. M. S.

### MULTIPLICATION OF GLADIOLUS CORMS.

In the December number I noticed that a bulb multiplied seven times. In 1916 I had two corms throwing nine new corms each, but no flowers resulted. My experience is that where corms divide into more than three that they do not bloom that year, but I have had them give good bloom the next year. I do not like to see them divide too much.

J. T. D.

### ORIGIN OF VARIETIES.

It was rather surprising to me to see Mr. Black make the statement in your March issue (under the title of "Origin of Varieties") that *Black Hawk* and *Mrs. Frank Pendleton* "were not considered worthy of a name by the originator, until their merits had been discovered by others who segregated them from seedling mixtures." Mr. Black has been misinformed, as the statement is wholly contradictory of the facts. *Mrs. Frank Pendleton* was grown by me under the name of *Giant Spot Lemoine* prior to its sale to Mr. W. W. Rawson of Boston. Neither was it ever grown in a mixture prior to the sale above referred to. A number of my customers had obtained the variety from me before I sold the stock under the name of *Giant Spot Lemoine* and to some of them I also sent mixtures into which I put a few bulbs of the variety from the separately grown stock. I regret to have to make this correction again, as once before I have been obliged to.

The variety *Black Hawk* did not leave my place in a "seedling mixture" but was sold by me to Mr. M. F. Wright in a choice mixture of separately growing seedlings of my production, together with some of my choice named varieties. My reason for not naming the variety was that I was growing other much superior varieties of the same class of color, some of which were to be offered as soon as I could work up a sufficient stock to enable me to introduce them.

The above statements can easily be verified by anyone from my records and a comparison of varieties. I am taking this occasion to correct at least some of the assertions made, of originators being unable to recognize any value in their productions until their merits were first discovered by others. The fact that an originator is growing a variety separately under a name or number is conclusive proof of his consciousness of its merit. All too often a rediscoverer has made the mistake, without a careful scrutiny of the facts, of thinking that his discovery was the original one. The indiscriminate renaming of varieties isolated from mixtures is very unadvisable and should be discouraged, as it is largely responsible for the duplicating of names which is causing so much confusion and disappointment.

A. E. KUNDERD.

NOS. 111-112-113.

I think I must take a ramble along your "Wayside" and it will be a sort of reminiscent ramble, for it was a number of years ago I purchased our first lot of bulbs of *Silver Trophy Sec. 2*, a mixture of white, light and yellow, from Mr. Arthur Cowee. I had read the description so many times that as I walked along the rows I imagined just how the flowers would look. I watched the growth feverishly and as they bloomed my delight was beyond measure. They were all that I had anticipated. Well, they were mine now, and I would please others as these had

me, by sending out just such an evenly balanced mixture of beautiful varieties. None of the beauty or value should be lost by passing through my hands. Instead, I would add to it if possible.

I saved seed from some that especially appealed to me and from those seedlings, when in bloom, selected the largest and most beautiful to add to my lot because I realized there would soon be too many repetitions. Seedlings that did not attain the pinnacle of excellence to entitle them to a place in my mixture, were not kept to be sold as cheap stock, but were destroyed. As I had received many inquiries for a florists' mixture, and after adding seedlings of my own raising I could not truthfully list it as *Silver Trophy, Sec. 2*, I gave the mixture the name of Florists' White and Light, and the description included the yellows.

I put a good share of my heart right into that mixture. It was my pride. The varieties I had added to it were not named and I did not know of any of the original *Silver Trophy Sec. 2* having names. I sold stock from the mixture to various growers, (Mr. Huth among others) who eventually wrote their satisfaction.

Again there was danger of too many repetitions and I decided that it was advisable to mark out some of the yellows and have a separate mixture composed of Yellows. I then bought varieties of named and numbered yellows to have greater variety. Each lot was grown separately and when they bloomed I found some of the lots to be the identical with the yellows which I had purchased in the *Silver Trophy lot 111-112-113* my foster children with names and numbers, but the same dear faces had returned to me.

MRS. A. H. AUSTIN.

#### REMOVING TOPS FROM GLADIOLUS CORMS AFTER DIGGING.

My experience is that when Gladioli are dug when quite green and not fully cured, it is well to leave the tops on until fully cured and the tops dry out. If, however, the bulbs are well ripened and the tops begin to turn yellow, it is best to cut off the top three or four inches above the bulb at the time of digging or after having laid in the sun for a day. My general plan is to let the bulbs get nearly ripe before digging. This, of course, loses some bulbs but is better for the bulbs.

W. D. PITCHER.

Note by the Editor—

We cannot agree with Mr. Pitcher in his method of cutting tops from Gladioli. Surely there is no good reason for leaving the top on after digging and the quicker they are cut off the better, and the closer they are cut to the bulb the better.

#### UNUSUAL INCREASE OF GLADIOLI.

From planting a second size corm of one of Kunderd's unnamed seedlings I dug two 3 inch corms and 987 cormels, some of which reached over six inches away from the main corms. From planting to digging was nine months.

C. M. S.

## A Rose Garden.

BY HORACE M. MARSHALL, (Mississippi.)

[Written expressly for *The Flower Grower*.]

NOT ALL GARDENS in Mississippi are Roseless. The finest out-of-door Roses on earth, not excepting the Vallee de Chamounix, grow in the alluvial valley of the Mississippi. Great bushes six or eight feet tall covered with hundreds of blooms from middle March to late December. And such blooms! As large as any that are forced in hothouses and bearing a perfume such as no Rose grown under glass ever had.

In the soft southern moonlight the odor,  
wafted on the breeze,  
Of this flower the purest pure just suits  
tender, true "Louise."

#### THE SOULFUL ROSE!

Not to grow Roses in a garden in the South is to advertise something lacking in one's flower make-up. No other flower so fills up song and story—or the florists' pockets. Reduced to dollars and cents the Rose is ahead of all other flowers, ten, fifteen, twenty, to one. Without it the garden under glass goes broke, and the garden in the open is but a patch of rambling weeds.

Of course, a millionaire can grow orchids to tickle a taste as fickle as the appetite that surfeits on humming bird wings, or a plain ordinary out-of-door gardener who thinks nothing of blowing one dollar and a quarter for bulbs, to be repeated ad infinitum, (which is going some these war times,) may get some yellow flowers early in the spring. But if out of doors a warm spell comes first, then Old Boreas "comes back" from out of the howling West, the blossoms are nipped in the bud and "green and yellow melancholy sit like patients on a monument smiling at grief." As oft quoted Shakespeare said.

Or even a "dry drought," such as comes frequently in March will shrivel and brown those beautiful odorless narcissi with aristocratic names to match the gaudy impossible pictures in seedmen and florists' catalogues. 'Tis said "fine words butter no parsnips" and they don't make fine flowers in the garden any more than do the aforesaid pictures in the catalogues. It takes lots of fertilizer, work and water with plenty of "know how" mixed in to grow flowers.

But of all the flowers grown the Rose in the South is easiest, surest and most satisfying. Such a thing as a failure of flowers in a Rose garden is unknown—impossible. Be it hot, be it cold, be it wet or be it dry, Roses, down here, are sure to bloom. The Rose will grow and bloom anywhere in the South, under any treatment and in any soil. Not only will grow but is growing everywhere except in "A Roseless Garden," told about in glowing words and beautifully rounded sentences in February issue of THE FLOWER GROWER.

Roses grow around Uncle Tom's cabin, where the old man sitting on the outside under the souging pine trees lays down the fiddle and the bow, and Old Aunt Jemima on the inside stops frying pan cakes, pokes her head out the window, to enjoy the whiff of Roses at evening tide.

Or at first blush of morn around Milady's window the grand, golden Marechal Niel fills the room with perfume of Attar of Roses at one thousand dollars an ounce and makes no charge.

But all this isn't helping the flower grower—that is, the flower grower scattered all over the country digging the garden to make vegetables and garden "sass" help pull down the H. C. L. who or whom has a soul as well as a—bread basket. They, too, may think:

"If thou by fortune be bereft,  
And in thy store there be but left  
Two loaves—sell one and with the dole,  
Buy Hyacinths to feed thy soul."

To them I say, plant Roses, even among the cabbage. The bugs may eat the cabbage and let the Roses be. But it don't matter, there will be plenty of Roses if you buy some *La France*, one year old, ten cent kind, if you cannot afford more or be not in a hurry. *Caroline Testout, Kaiserine Augusta Victoria, Pearl of the Gardens, Safrano, Lyonnaise, Paul Neyron, Marie Van Houtte, Maman Cochet, Souvenir de la Mal Maison, American Beauty, Duchesse de Brabant, Jacqueminot, Climbing Devoniensis, Marechal Niel, Reine Marie Henriette, Maurice Rouvier*, all of which are good growers and bloomers, except the *Pearl*. Order, also, some more recent, newer kind, a collection if you please. Have them to arrive the middle of November or February.

If planted out in the fall protect with a little straw in very cold weather. If one year old plants are bought set them in a well prepared bed, in rows two feet apart, with about a foot and a half between plants. Make the bed like a cold frame without any cover. The following November transplant to permanent location in the garden. *Permanent* is used advisedly: Roses 20 to 25 years old are of frequent occurrence and some 50 years old are known hereabouts.

Think of it, that man with "A Roseless Garden," digging to beat the band and packing water on both shoulders, perhaps, while I, in my old age, enjoy the fruits—or rather flowers—planted in the days when I was young and full of hustle.

THE FLOWER GROWER has been issued rather late in the month since January, but this month we are issuing earlier and we hope to have the May number in the mail promptly on the first.

## Perennial Phlox.

When planting have the crown of the plant one inch below the surface when planted. I believe many failures in planting them can be traced to too deep planting.

Phlox come the nearest to being "all good ones" of any flower I grow; yet some are far superior to others. They are the same as other flowers, and some varieties which have extra fine flowers have a weak constitution, and cannot be grown successfully.

A short list of desirable varieties is as follows:

*Amelia, Athis, B. Comte, Eclairer, Eiffel Tower, Esclamonde, Jas. Garland, Lothair, Mrs. Mellinger, Pluton, Pantheon, Pres. Taft, Purity, Richard Wallace, R. P. Struthers and Von Hochberg.*

*Jules Cambon, Manzelbrunner and Widar* are the best phloxes with a white eye that I have tested.

WILLIS E. FRYER.

## That Ground Hog Fable.

[Written expressly for *The Flower Grower*.]

The Indiana ground hog has utterly destroyed what reputation he had this year, and it is only right that those who have in the past tied their faith to his value as a weather prognosticator should have their attention called to his delinquency.

It may be claimed that the Indiana member of the family is only a Hoosier and not to be depended upon, but we have strong proof that the idiosyncrasies of the little beast extend to the branches of his family located in other sections of the country. Also, there are those (no small number either) who were wont to pin absolute faith to the far-sightedness of the Hoosier ground hog.

On February 2, 1918, it is safe to conclude that the ground hog was out of his hole, because it has always been a part of his business to be out of his hole on that particular date, and we feel sure that he didn't fail this year. He has been coming out on that date for so long a time that it must have become a matter of habit with him, also the infallible practice of his sires for so many generations back that it must be instinct by this time.

Presuming that he did come out, therefore, and the day being fair, he must have seen his shadow, unless he was temporarily blinded. And if he had lost his sight, he must have felt the heat of the sun and known that it was his business to crawl back in his hole and remain there during the several weeks of bad weather sure to follow.

But Mr. Ground Hog certainly slipped a cog this year. Maybe he got his dates mixed, perhaps his alarm clock failed to wake him from his long slumber, or some energetic dog may have stood in front of his hole preventing his exit. Whatever may be the case, something is all wrong with the calculations. March came in mild as a lamb, with many sunny days, the frost all

came out of the soil, and it was in fine condition to work by the middle of the month.

Destroyed confidence is one of the saddest things in this world of tears. It is heart-breaking to admit that the prophet who has been honored for ages has fallen down, but we are driven to the conclusion that the "hunch" of the man who farms or gardens is just about as dependable as the actions of the ground hog for the few weeks following February 2.

One of the worst features of the case is that the ground hog doesn't seem to care a whoop for the disappointment he has caused, or the feelings of his followers, who have shaped their courses by him for so many years. He is frisking around in his usual habitats and enjoying the fine days just as much as the kids who are playing marbles and flying their kites. He's a faker, pure and simple, and we mistrust that he always has been.

HARMON W. MARSH, (Indiana.)

*Note by the Editor—*

The ground hog fable is so well known the country over that we cannot refrain from calling attention to Mr. Marsh's article. Perhaps the bear takes the place of the ground hog with some communities, as it does in Northern New York for instance, but we guess that the ground hog is better known of the two.

The enormous waste of time in talking about such foolish old-fashioned ideas and fables is worth calling attention to. Of course, people must talk about something, and in the early days when such foolish things originated, they did not have so much reading matter as we do now, and naturally they were thrown back on visiting and gossip to a greater extent. Nowadays there is no excuse for any man to waste time talking about the ground hog fable except as Mr. Marsh has done to call attention to the fallacy and foolishness of the idea.

## Transplanting Wild Flowers.

Never attempt to transplant a spring blooming flower, either wild or tame, in the spring. The rule is to transplant spring bloomers in the fall, and fall or late summer bloomers in the spring, but this is no iron rule. Some plants will not bear transplanting when dormant, while others will not bear transplanting when growing. The Rose, wild or tame, should never be transplanted dormant, but after the leaves have started and when the buds are not yet formed. For the Rose blooming in June, as most wild Roses do, the transplanting should be done carefully about the middle of May, the old-fashioned rule being to transplant at corn planting time, which in the Northern States is from the middle to the 20th of May. Few things are prettier than a mass or low hedge of wild Roses.

Wild cherries, wild plums and the wild yellow currant may be transplanted in the fall, after the wood is well ripened. Even if the fruits of these trees are not wanted, the shrubs and trees themselves are ornamental, with their great profusion of blossoms coming long before the apple and pear trees clothe the country with beauty.

Hepaticas may be taken up in the fall, but care should be taken not to injure the roots. These blossom best in shady places, and the nature lover who seeks them in their native haunts often finds them half covered with dead leaves. This may be a hint as to their needs—a mulch of leaves for winter.

The bulbs of the Adder's Tongue may be taken up in the fall. The scarlet Columbine may be transplanted in the spring, or it may be grown from seeds. The wild Morning-glory may be grown from seeds, and needs little care.

To force some of these things for winter bloom, say the wild cherry and plum, wild crabapple, arbutus and almost any early blooming and woody textured plant, gather the shoots in late fall; those on trees or shrubs may be gathered any time, even in the winter, but the low growing ones which will be snow covered should be gathered before hidden. Place in jars of water in a room not too warm. It is a delight to the nature lover to watch the shoot bud and burst into bloom. The flowers will be more delicate than those grown out of doors, but they will be beautiful, and bring a breath of spring in the coldest weather.

Apples, pears, flowering almond, and all shrubby growing, early blooming plants may be made to give toll to the winter window bloomers by taking shoots as directed and forcing them in water in the house.—ROSE S. MILLER in *Ohio Farmer*.

## American Gladiolus Society.

The full page announcement by A. E. Kunderd in our advertising pages this month is worthy of the special consideration of all Gladiolus growers. Mr. Kunderd practically offers to send without charge 50 of his Ideal Mixed first size corms to the first one hundred persons who send him their applications for membership in the American Gladiolus Society together with \$2.00 which pays the regular annual dues. The regular initiation fee of \$1.00 has been waived by the Executive Committee until June 1st so that those joining now need not pay the initiation fee.

Mr. Kunderd is president of the society and we commend his enterprise and public-spiritedness in thus making this liberal offer to induce new membership in the society. We also commend the Ideal Mixture which Mr. Kunderd offers as we have had personal experience with it in our own garden.

## Gladiolus Studies I.

(Continued from page 41.)

Society, 1858, expressed the wish that "seedlings would be raised!" The closing paragraph shows how successfully we have raised them:

"American growers do not depend on the novelties sent out by foreign firms, for they have produced varieties better suited to this soil and climate. \* \* \* \* The Gladiolus growers are making a new and distinctly American type of plant and flower. Through the breaking of old world fetters and limitations the way is open to further achievement, for which the future holds bright prospects for American Gladiolus breeders."

**JOHN ZEESTRATEN**  
GROWER OF CHOICE  
GLADIOLI  
Mansfield - Mass.

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Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.

**GLADIOLI**—America, Mrs. Francis King and Augusta, 1½ in. up, \$2.00 per hundred. America, 1 in. to 1½ in., \$1.50 per hundred. Healthy stock. Cash with order. F. H. HAWLEY, West Rupert, Vt.

**WANTED**—Black Bulblets of Niagara, Panama, Peace, Pendleton, Primulinus Hybrids, Schwaben and War. Submit samples with price per gallon or bushel. THE TEMPLIN-CROCKETT-BRADLEY CO., Sta. A, Cleveland, Ohio.

**GLADIOLI**—Planting stock of America and Mrs. Francis King, ¼ to ½ inch; 10,000 of each at \$1.50 per thousand; 300 Niagara, 1 to 1½ in. at \$3 per hundred. Cash with order, please.  
J. W. SEILER, Wayland, Ohio, R. D. 21.

**RUTH LAW**, Black Joe, Titanic, Peerless Pink, Montezuma, Hyacinth, Carmen Sylva, Jumbo and many other new, beautiful Gladioli, all our own originations. Send for illustrated catalog.  
THE DECORAH GLADIOLUS GARDENS, Decorah, Iowa.

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**RARE** and better Peony and Cactus Dahlias—100 named varieties; many unobtainable elsewhere. Correspondence only. No catalogue. Mixed as above, identity lost, 30c.—\$3 doz. F. E. TAYLOR, Wildwood Ave., Upper Montclair, N. J.

**GLADIOLUS**—20 named varieties, all different, labeled, \$1.00; 25 choice mixed, not labeled, 50c.; 100 for \$2.00. Cormels from mixture 10c. per 100. All post paid. Send for list.  
F. F. FLETCHER, Templeton, Mass.

**50 OF KUNDERD'S** productions, such as Fair Columbian, Pr. of Goshen, Pendleton, 10c.; K. Glory, 8c.; Violet Gl., Orange Gl., 40c.; Splendor, 18c., etc. Also Schwaben and Golden King, 10c., etc. Prepaid. Besides grand Dahlias. Write  
R. C. H. LENSKI, Bexley, Columbus, O.

**BEST OFFER YET**—100 mixed Gladiolus bulbs, flowering size, containing many Groff's Hybrids, also several beautiful named kinds labeled, and one small bulb of Prince of Wales, all for \$1.00 express collect. Send for free Gladiolus catalog describing the new Praecox Hybrids.  
HOWARD GILLET, Box F, Lebanon Springs, N. Y.

**GLADIOLUS**—20 named varieties, all different and labeled, \$1.00; 25 fine mixed, not labeled, \$1.00; 100 for \$3.50. America, doz. 50c.; 100, \$2.00; Blanche, doz. \$1.50; 100, \$10.00. All post paid. No price list. Also a large list of choice Dahlia bulbs at popular prices. I. A. TRAVIS, Proprietor, Gladalia Gardens, 116 S. Jackson St., Elkhorn, Wis.

**FOR SALE**—Surplus stock of about 3,000 Gladiolus corms, blooming size, in mixture of the smaller type unnamed varieties and some named mixed; 75c. per hundred by express not prepaid.  
W. D. PITCHER, Buchanan, Mich.

**GLADIOLUS**—20 named varieties, all different, \$1; 25 finest mixed, not labeled, \$1.00; 100 for \$3.50; young, vigorous, blooming sized corms, one inch or over in size; also hard-shelled cormels from our finest mixed strain, 25c. per hundred in any quantity; all postpaid. J. H. TILTON, P. O. Box 48, Salem, N. H.

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HOWARD BLACKLY, Kalispell, Montana.

**FOR SALE**—Gladiolus in mixture. Large, clean bulbs, 25c. per dozen; \$1.30 per hundred, postpaid anywhere in the 3rd zone. Will enclose one or more named varieties in each order. R. E. BOOMHOWER, Greenville, Greene Co., N. Y.

**W. E. KIRCHHOFF CO.**, Pembroke, N. Y., growers of the finest Gladioli, such as Pendleton, Panama, Niagara, Pink Perfection, Europa, Mrs. Fryer, War, Peace, etc. Correspondence solicited.

**WANTED GLADIOLI**—Want quotations on planting size Gladioli and black bulblets. Must be young, healthy stock. State size and quantity; can use all varieties. Will pay cash. J. J. GRULLEMANS, 10126 Nanford road, Cleveland, Ohio.

**GLADIOLUS**—Guaranteed true to name.

	Per 100
America	\$1.50
Alice Carey	3.00
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Price list of other varieties mailed free.  
HENRY C. ECKERT, Belleville, Ill.

## GLADIOLI

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Send for my catalog, containing 96 distinct varieties and some excellent mixtures, TODAY—IT IS FREE.

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## Colorado Grown Bulbs and Seeds

Choice mixed Zinnias and Cosmos. Early dwarf mammoth flowering at wholesale prices to dealers. Some extra fine Dahlias. If interested in fine bulbs write at once for retail catalogue of Dahlias, Cannas and Gladioli.

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## 1000 Onion Sets for \$1.25

500 for 65c., prepaid anywhere in the United States. Myspecial "HAZEL" size (about 3 qts.) Every set makes an onion. Finest quality sets you ever saw. Colorado grown. Satisfaction or money back. Colors, Red, Yellow or White. Order early.

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## J. H. MCKIBBIN

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Growers of Choice Gladioli

We are offering Planting Sizes and Bulblets of several desirable varieties.

We specialize in the choice American and French varieties. Catalogue on request.

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**WILDFLOWERS** The haunts, habits and uses of our native plants, their behavior under cultivation, and the origination of new forms by sports and hybridizing is the special field of  
**THE AMERICAN BOTANIST**  
\$1.25 a year  
SAMPLE FREE 23 VOLUMES ISSUED  
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GLADIOLI  
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Catalogue, printed in English, on application.

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**Delphinium** (H'dy Larkspur) BELLADONNA. The best of all Hardy Larkspur, turquoise blue, in bloom from June till frost. 3 ft. Two year plants at \$3.00 per dozen, prepaid. They will give you an immediate effect.

**Plant Perennials** and keep your home cheerful in spite of war. Plan your garden now and let us help you. Watch our Ads. Something new each month. We are at your service, so write

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## POTATOES—50 NEW VARIETIES

can positively be grown from one packet of Hybridized Potato Seeds. Every hill will be different. All colors, shapes and sizes. May be worth a gold mine. Don't miss these rarest and most wonderful of Seeds. Packet, with directions, 15c., 4 for 50c., 10 for \$1.00. Please order now.

F. A. McDonald, Cavalier County, North Dakota, writes—

"The packet of Hybridized Potato Seeds brought splendid results. No two hills were alike. Some were white, some yellow, some red, etc. One plant bore 276 potatoes—some large as hen's eggs. Two remarkable freaks appeared. One ran like a cucumber vine, the other produced beautiful red potatoes—exactly the shape of a banana. I await future developments with great interest."

Seven Seedlings of Rare Value:

"I have a magnificent Seedling Potato grown from your Hybridized Seed, and have raised over 400 bushels. A prominent seedsman wants to introduce them and is trying to buy me out. I have six other seedlings that are more than good. E. A. Goodspeed, Onondaga County, New York."

**GEO. S. WOODRUFF, Independence, Iowa**

## BOUND VOLUMES FOR SALE

Complete bound copies of **The Modern Gladiolus Grower** of volumes I, II, III and IV with indexes are now available. They aggregate about 725 pages and contain the most complete information on Gladiolus growing to be had anywhere. Mailed to any address postpaid \$1.25 per volume or \$5.00 for the four.

**MADISON COOPER, Publisher, - Calcium, N. Y.**

## IOWA GROWN GLADIOLI

**INTRODUCTORY OFFER**—Two each of the following named varieties, properly labeled, prepaid for 50 cents  
AMERICA, pink; AUGUSTA, white; B. HULOT, best blue; INDEPENDENCE, dark pink; CANDIDUM, fine white; VICTORY, light yellow.

Three collections for \$1.00. When three are ordered I will include one good sized bulb of the superb sort "Mrs. Watt."

Several bushels, extra fine mixed at \$1.50 per 100 - not prepaid.

**GLEN P. HOWARD Box 524, Harlan, Iowa**



# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 5

May  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

### Observations on Gladiolus Growing in Southern California.

[Written expressly for *The Flower Grower*.]

BY DR. C. H. CASTLE.

THE CELEBRATED CLIMATE of Southern California has been so well advertised in the past that any comment I might make would be unnecessary except that any grower reading these lines should remember the characteristics of the climate in that we have only a decided wet and a dry season.

As an average, our rainfall is confined to the months of the Eastern winter, and there are seasons such as the present one in which we had practically no rain for over eight months. We can feel sure that after the first of April each year there will be no rain to speak of till the following October when the corms are dug and in storage.

The culture of the Gladiolus during a season is something like this; the field of course being dry is irrigated in the fall by flooding, say in the months of October or November. There may be rain but we do not depend on it. The ground is plowed as deep as possible with teams at least ten inches, cross plowed and harrowed twice each way. Then the furrows for the bulbs are laid off, eighteen inches for hand cultivation and two feet apart for horse cultivation.

These furrows are made by the use of a small plow once each way in the row, throwing the dirt out on both sides. This leaves a ditch rather square on the sides, the width depending on the size of the plow used. Water is then run in the ditches to moisten the subsoil. The bulbs are planted any time thereafter, but I have secured better results from the plantings made from the 15th of December to the 1st of February. I use the same method for bulbs of all sizes only planting fewer across the row as the sizes grow larger. I have never planted single rows but as many as four flowering bulbs across the ditch at about twice the width of the bulb apart. Bulblets are planted broadcast in the ditches and covered the same as the bulbs.

The bulbs are covered by hand labor using the ridge on one side to cover the row next to it. I then apply a top

stalks are about six inches high, and have two or three leaves, furrows are run between the rows about four inches deep and the dirt thrown up around the plants. This ditch is then filled with fresh fertilizer and watered by sprinkling. This is done every two weeks if there is no rain and is followed by cultivation. When the first buds are formed another layer of fertilizer is applied and watered thoroughly. This is the last food the bulbs are given and after the last cuttings have been made the field is allowed to dry off and when the bulbs are dug they are already cured and will stand shipment or storage.

In growing Gladioli I have no use for well rotted or leached out manure except that it has been rotted into the field and I cannot see that the character of the soil or the chemical elements of it in the top four inches, that is the part above the bulb is going to be of any use to a bulb that sends all its roots downwards. (Because of bottom irrigation—Ed.) The top soil to me is only a mulch to conserve the moisture and the fertilizer I put on the field each year furnishes the humus for the following year, while the liquid elements of the fertilizer are washed down to the roots where needed. I also use this method in the home garden, digging the ditches the width of a spade with distance enough between the rows to allow for cutting the blooms.

There is a great deal of satisfaction in being able to control absolutely the water, giving as needed and withholding if the plants seem to have plenty. At digging time there is no question as to whether your bulbs will dry as wished or not as you have control of these conditions. The tops are twisted off (better cut off—Ed.) and the bulbets removed at the time the bulbs are dug, the bulbs are stored in crates two feet wide and three feet long and three inches in depth. These are made of slats with cracks wide enough to per-



GLADIOLUS—INCONTESTABLE.

Originated from the Island of Guernsey and exhibited at Noordwijk, Holland, by Alkemade & Co.

In 1913 it was given an Award of Merit by the National Gladiolus Society of London and by the General Bulb Growers' Society, of Haarlem, Holland.

The National Gladiolus Society's 1913 handbook describes it as follows: *Gladiolus Lemoinei Incontestable*, pure white, in the center spotted orange and carmine.

The same Society's annual for 1915 notes that it has been placed on the Society's register and that the date of flowering was July 11th, its height 3 ft. 9 in. and that the flowers were very large and that it was a fine show variety.

dressing of fresh dairy or chicken fertilizer and leave the field till the sprouts show above the ground. When the

mit of the circulation of air through them.

The plants at this writing (March 20th) are about a foot high and have had their first layer of fertilizer in the ditches as well as the top dressing applied in January. I expect to make the first cuttings of blooms about the first to tenth of May with the bulk of the cutting coming about Decoration Day. Of course there will be flowers before the above mentioned date but by commercial cutting I mean five hundred flowers or more per day.

This is the natural time for the flowers that come from bulbs raised in this country and I am unable to see why under intensive cultivation as used in forcing these bulbs will not do better than bulbs whose natural blooming time is later. I note discussion regarding bulbs deteriorating with age and would say, that in my experience that the older the corm the more prone to suffer from disease. Undoubtedly they do lose in vitality in this country after the fourth year, becoming flatter and thinner and my best flowers are raised from the third year bulbs.

I also find that about twenty per cent of the bulblets will bloom marketable flowers the first year from most of the commoner varieties. The bulbs from bulblets grade about twenty per cent first size, thirty per cent second, and the balance third and fourth sizes. Formerly I grew about one hundred varieties but last year put into the mixed bulbs all but sixteen varieties which I shall grow, hybridizing from them and adding as the newer ones find favor. I have a number of seedlings that date back ten years and over and am adding to the collection each year. This is the most interesting work connected with the growing of the Gladiolus as the crossing and record keeping is very simple and can be done by any amateur in his own garden and results may be had equal to any if care in the choice of varieties for the parents are used. The amateur is more apt to be careful and make "pets" of the flowers than the professional and that all adds to the results. There is a satisfaction in growing something new and original in one's own garden. I am unable to see the advantage of flowers five to eight feet in height as that condition generally necessitates staking and to date I have never had to use stakes either in the field or home garden. I might also add that a chart of the planting is always made with the date of planting, the origin of the stock, the age of the bulbs and any other data that might be of use. Later the number of flowers cut is added to the record of the bed.

In following up the bulbs that I have sold I find that the Gladiolus is surely resistant to neglect, will grow and flower in most any kind of soil, from the mountains to the sea, and in all is about the easiest to grow and the most satisfactory flower in the garden. It is possible out here to have flowers from Gladioli nearly every month of the year, one of the growers here cutting over ten thousand for the Christmas holiday trade. In the home garden the

bulbs consist mostly of seedlings but in the field the varieties are as follows: *America, Mrs. Francis King, Augusta, Peace, Sulphur Queen, Golden King, Halley, War, Mrs. Frank Pendleton, Mrs. Watt, Ida Van, Schwaben, Rouge Torch and Liebesfeuer.* These have all been tested over several years growth and newer varieties are added and tested each year. There are many others in the mixed varieties including the ones above but the ones named are the most satisfactory to me and to the trade.

There is no doubt now that American grown bulbs and plants must be grown to supply the home market and I can only urge the amateur to insist on American grown bulbs and plants as there can be no question of their superiority over the imported stock.

Each year I learn more and more of the habits, needs of the plants and the general handling of the crop both in the garden and in the field and the work becomes more interesting. To the amateur who is growing Gladioli for the first time I would say, buy named varieties, not too many kinds at first, of a reputable grower, cultivate the soil well and deep, give plenty of water and sunshine, and you will be well repaid for your money and work expended.

### Water Lilies.

A pond with Water Lilies growing in it is always a pleasing feature on the grounds, whether they be those of a private residence or a commercial establishment. Even if the nurseryman has not the facilities for growing them, it is always worth while to know something about them.

The culture of Water Lilies and other aquatics is very simple and very often an unsightly depression can be converted into a beauty spot at little cost and labor.

The best soil for growing all aquatics is the rotted vegetable matter from ponds or swamps mixed with one-third well rotted manure, and the best substitute for same is good heavy loam enriched with one-third well-decayed cow manure. All Nymphaeas and other flowering aquatics should be planted so that they will be exposed to full sunlight.

In constructing artificial ponds where the soil is not sufficiently retentive to hold water a good method is to smooth and pound firmly the bottom and sides of the excavation, then cover the whole with a layer of six inches of puddled clay, pounding it well with wooden mauls so as to bring it into one solid mass. Cover the sides with rough stones or put on a thin layer of concrete. This will prevent the sides from washing. A total depth of two feet is sufficient, one foot for soil and one for water, with an overthrow so constructed that the pond can be entirely drained or the water held at any level desired.

*Depth and supply of water.* This may vary from a few inches to four feet, but all of the hardy Nymphaeas and Nelumbiums will give better results if covered by 12 inches of water during the summer months. As all Water Lilies, and more especially the tender varieties, prefer still, warm water, do not allow the continuous flow of the fountain in the smaller pool or other continuous inflow of water in connection with the larger pond. When such are fed with a large inflow of cold water, Lilies will not be a success. For artificial ponds and tanks it is best only to give enough fresh water to replace what is

lost by evaporation, etc., and the best method of doing so is to give the ponds a good syringing from a hose late in the afternoon or early in the evening. The syringing besides giving the necessary amount of fresh water, will be very beneficial to the plants, as it will keep in check green and black fly and keep the leaves free from dust.

The best results will be obtained when planted in the natural mud bed, but if the water is too deep, construct boxes four feet or more square and eighteen inches deep, and place these in the pond below the surface of the water. In artificial ponds cement basins cover the entire bottom with 10 inches of soil, top-dressed with two inches of sand or gravel. If this cannot be done use boxes or half-barrels filled with aquatic soil. In planting Nymphaeas, all that is necessary is to push the rhizomes into the soft mud, so that they will be merely covered, and it is a good precaution to place a stone on them until rooted, to keep them in place. When planting they should be covered only with from two to three inches of water until they have made their first floating leaf; then gradually increase the water as the plants grow.

*Winter and Future Treatment.* Hardy Nymphaeas and Nelumbiums need no care during the winter, provided the water is of sufficient depth so that it will not freeze to the crown of the plants. In cement tanks drain off all the water and fill in with leaves or cover with boards and leaves or litter. The second spring after planting it will be advisable to transplant all such plants as have made a strong growth. This should be done by washing away most of the soil from the roots, removing all side growths and replanting the strong roots into fresh soil as before. The side growths, if planted two or three together, will also make flowering plants the same season. Lilies which are grown in beds of soil or in natural ponds will be much benefited by an application in spring of dried blood manure, broadcasted on the surface of the water at the rate of one pound to every ten square feet of surface.

*Nelumbiums.* The treatment is the same as recommended for hardy Nymphaeas, excepting that they do best when planted in mud or soil that is at least two feet deep and covered only with six inches of water. When planted with other aquatics there should be partitions of brick or boards, so as to confine the tubers, otherwise they will soon take possession of the entire pond. In planting place the tubers horizontally in the mud, so that the point will be merely covered. They are gross feeders, and should have dried blood manure applied each spring, as suggested above.—*National Nurseryman.*

We learn of further losses from freezing of Gladiolus corms during the past season. Some of these losses were stock frozen in storage and still others are losses from freezing of stock in the field before getting it into storage. Winter shut in rather suddenly last fall and very low temperatures were experienced early in the season. Damage and loss while in storage resulted from extremely low temperature for long continued periods during the winter. It is a little out of season to suggest that a thermometer should be placed in the bulb storage room and inspected during cold weather. Be sure the thermometer is reasonably accurate and don't take chances on two or three degrees. A lighted lamp or lantern is often sufficient to keep the temperature from dropping to a dangerous point.

## THE ROSE

### Climbing Roses.

[From The Mother's Magazine.]

Note by the Editor—

[This excellent article on "Climbing Roses" by the talented horticultural writer, J. Horace McFarland, is an abridgment of the original article as it appeared in *The Mother's Magazine*. We regret our inability to publish the article in full because it is certainly excellent and Rose enthusiasts will do well to procure the issue of the magazine referred to containing this article in full. It has a number of unusually good illustrations.

We are indebted for the work of abridgment of this article to Mr. H. G. Reading, who wrote the article entitled, "Tausendschon a Climbing Rose of Merit and Distinction" in the January issue of THE FLOWER GROWER. Please note that Mr. McFarland bears out



Tausendschön is the one best climber of the cluster class.

the opinion held by Mr. Reading that *Tausendschön* has great merit as a climbing Rose.]

Last October *The Mother's Magazine* permitted me to discuss the subject of "Getting Better Roses." In that article I suggested a certain form of Rose advance, and expressed willingness to provide information for any mother who wanted to try it out. The response has been surprising, not only in respect to the thoughtful inquiries that have come to me from all parts of the United States, but in respect to the Rose interest thus evidenced. It is clearly apparent that very many of the mothers of America want to grow Roses, and to grow better Roses. If I had needed confirmation of my belief that the Rose is the universal flower, the letters received would have provided it.

I admit enthusiasm about Rose growing as it is now developing. "A Rose for every home, a bush for every garden," is the de-

clared motto of the American Rose Society, and each year sees now an advance toward that happy consummation. I am tempted to apply to any Rose-growing efforts the slogan of a garden contest recently held in a city of the middle west. It is, "You win if you lose," and that is surely true as to thoughtful Rose-growing for the effort itself is uplifting, restful, improving. I urged last fall the planting then of many hardy Roses, rather than putting off planting until spring.

But early spring planting is next best, and nearly as good as fall planting of Roses. Notice the italics for emphasis on that word *early*. It means that the plants should be gotten into the well-prepared ground just as quickly after the frost is out of it as is possible. Every day earlier counts for better Roses!

It would not be honest toward the good women who will read these words did I not here set forth my belief that outdoor-grown, or so-called "field"-grown, Roses, shipped promptly after the nurseryman has dug them from the ground they grew in, are preferable. Further, I believe in getting all the roots, which seldom is possible if the roots of the plants grown in the open ground have been forced into a pot.

The little mail-order, own-root Roses that are shipped in full growth have their place, and do well in some locations, particularly in the south. They are, or ought to be, cheaper than the husky, outdoor plants that have come through one winter and one summer before they are shipped.

Before I discuss the handling of the hardy climbing Roses I hope to have generously planted about many homes this spring, let me repeat a few maxims as to Rose-growing.

Roses prefer strong soil, rather than light and sandy soil, though they will grow quite freely in well-fertilized sandy loam. They are dainty in bloom, but not in feeding, for they need plenty of available fertility in the ground that sustains them. I saw ideal Rose soil at the great establishment of a friend who has grown them for a half-century, and one of whose regal productions is on my desk now—a massive bloom of four-score petals, five inches across its deep heart, and giving forth the breath of June! He collected roadside sods, which are piled up in layers with cow-manure between them, and in a year are just right for his Roses. This soil is fibrous from the slowly rotting sod.

But any soil that would produce good corn or potatoes or peas will make good Roses. It needs to be thoroughly mixed with well-rotted manure, up to a third of its bulk. Cow

manure is preferred, but stable manure will answer. Let me italicize the *thoroughness* of the mixture of soil and manure. Dig it together, and then dig it again and again, each time working the soil and manure into each other.

For any Rose success, deep preparation of the soil is desirable. A foot is barely kind to the Rose plants; two feet is better, and three feet is luxurious. If deep holes are dug or deep beds are prepared, get about a foot of some rough, coarse sods or manure or decay-brush at the bottom for drainage.

Climbing Roses of the sorts now obtainable may be used in ways not so well understood as is desirable. The first thought about a climber is that it should cover a porch, or a trellis against the house, or ramble over the doorway. It is very beautiful in such use, but when I look at my neighbor's street hedge of American Pillar, yet holding its bright and solid foliage against the frost of this fall day during which I am writing, I wonder whether that is not an even finer use?

Then I think of the hedge around my own Rose garden, trained three feet high between eight-foot end and path posts, to which the Roses garland, and which for full six weeks gives me a glory of early summer bloom, with its twenty-six varieties, literally astonishing the visiting Californians who are supposed to be inured to Rose showers—and that seems the best use.

But off in the garden is another climber, which I have permitted to grow to about five feet in height, with from six to a dozen strong shoots from the ground. These are twined in upon each other in a sort of balloon shape, hard to describe but easy enough to do if one wears leather gloves. When the bloom comes, the whole top of the balloon is aflame with Climbing American Beauty, and no shrub in the garden can touch it in glory. In this shape, as in other garden uses, the good foliage of these climbers makes the Rose as presentable as any other shrub when out of bloom.

At the National Rose Garden in Arlington, where the American Rose Society and the United States Department of Agriculture are together trying out more than six hundred Rose varieties, there is a perfection of trellis training that gave very lovely results last summer. The trellis is formed of commercial galvanized iron high fence posts strung with wires stretched about a foot apart. On these the climbers are trained or tied out in fan shape, so that every bloom has a full chance at sun, shower, air, and your eyes, which latter will linger longer upon their perfection. There is no extravagance about this trellis training; it only requires a little time about once a week in the growing time. Nor are the posts expensive.

In Captain Thomas' wonderful Chestnut Hill Rose Garden certain climbers are carried up some five or six feet upon a wooden trellis, and at the top the canes are inter-twined to form a shape like a rather flat letter O laid down. The effect in bloom time is startling.

The English call certain varieties "pillar" Roses. The Rose is planted beside a post, and its shoots are rather narrowly twined about and around the central support, being turned over and trimmed off at the top. Contrary to all the laws and edicts of the Rose authorities, my neighbor, whose pillar Roses have made a very beautiful showing, cuts all the side shoots up and down the post to not over six inches in length, this being done in fall, winter or early spring. In consequence, the blooming shoots which spring from the last year's growths are close to the center, and rather short, so that in June his *Leuchstern*, *Christine Wright* and *Dr. Van Fleet* are literally pillars of bloom.

Looking last June from the car window of a western bound Pennsylvania railroad train

(Concluded on page 57.)

## MRS. AUSTIN'S TALKS

[Written expressly for The Flower Grower.]

### The Kaiser Must

#### "Keep Off the Grass."

IT WAS only a few weeks ago that a neighbor said:

"Won't the grass look good to us when this awful winter is over?" The cold and snow continued but we knew the grass was only dormant and would come forth again abundantly, and by contrast seem even more beautiful in its rich restful coloring. The Creator surely makes these great contrasts to help us fully appreciate what otherwise might seem the common things of life.

Grass grows freely for us all and we are all privileged to enjoy it and the beautiful things connected with it, if we make ourselves receptive. Its velvet softness lures us to long walks in field and pasture. Tucked back in my memory I have a picture of a couple of little girls gazing ruefully at brilliant grass stains on their best white dresses which had been forgotten when in childish abandon they had rolled again and again down a steep grassy bank. I hope soon to spend some time at Elm Hill Farm where for thirty years I eagerly watched for the first green blades on the hillside, made a corsage bouquet of the early dandelion or perhaps gathered the plants for a dinner of "greens." I shall look for the violets that grew so thickly under my clothesline, and now and then brought neighborhood disgrace on my head when I tardily hung my washing in afternoon. I shall notice the buttercup plants forming their buds and see whether the dainty white blooms of the caraway will be ready to use with other flowers on Memorial Day.

Occasionally, after our first burst of enthusiasm over the grass in its springtime freshness, we forget the wonder of it until drought or fire or something equally disastrous deprives us of its verdant beauty, then again we value it and seek means for its protection. If thoughtless ones walk over it we explain that it is of value and that we are caring for it. We are willing to share the enjoyment of it with others but of course we do not expect them to abuse the privilege. As there may be more thoughtless ones we deem it wise to put up a sign asking them to "Keep off the grass." If enemies viciously tramp it down we warn them that they *must* "keep off our grass."

Isn't it a little like the unbounded liberty that we people of democratic America have enjoyed so long that we cannot realize what this world would be without it? We are menaced by grave disaster. A vicious and ruthless foe is tramping the border of our grass of liberty and threatening the home that stands back of it.

In the recent pleasure-seeking past, possibly, to outward appearances, the roots of the liberty love centered in the



hearts of the American people have seemed sleeping but they are now aroused. Our soldiers are battling on the grass front and those at home are putting up the signs and are ready to enforce them. War gardens, Liberty bonds, Red Cross, Y. M. C. A. and many others are all prominent signs.

Let us make them more efficient. The great army in training truly means: You shall keep off our grass.

The soldier would indeed be disheartened if he thought the folks at home were not backing him up, he knows they will "Keep The Home Fires Burning," which means that the industries and pleasures, various enjoyments, interests in anything that will bring comfort must be carried on cheerfully and hopefully the same as in the days of peace. Wailers are not workers.

"Tho' your lads are far away,  
They dream of Home;  
There's a silver lining  
Thro' the dark clouds shining;  
Turn the dark cloud inside out  
Till the boys come home."

My suggestions last month that flowers should have a place in the War garden was not made from lack of patriotism but in the belief that there is a greater need of flowers in times of war than even in peace. Children in either their home or school gardens should be taught the culture of flowers as well as vegetables.

And now in continuation of cultural hints of the Gladiolus row in the war garden: As the weather was rather cold the bulbs were left covered level with the ground but as it became warmer they were to be ridged up either with a hoe or cultivator. This ridging smothers the little weeds that have started into growth and also forms a dust mulch preventing the escape of moisture. This ridging saves much handwork in weeding.

It is interesting to grow Gladioli from seed and there are many ways of making a seed bed but if space is limited they may be planted in the row with the large bulbs, being careful not to cover them too deeply. They do not have hard shells like black bulblets and will come up quickly under nearly the same conditions. Plant when weather is warm, in drills the same as black bulblets but more shallow. Sow thickly and it is well to keep them covered with bagging or old carpet to prevent drying out. Remove when seedlings appear. Keep up cultivation between the rows.

Every seed, bulb or plant that is grown carefully and furnishes food or beauty, comfort or cheerfulness is a weapon of defense against the Kaiser and an emphatic notice that *he shall be kept off our grass.*

MRS. A. H. AUSTIN.

## Cutting Flowers.

[ERNEST BRAUNTON in California Cultivator.]

If one were to ask me which I preferred, flowers in the house, or flowers in the garden, I could have but one answer. They would remain in the garden, and there is no indecision possible. I am not extremely fond of flowers in a vase; not that they are not beautiful, not that they are altogether out of place, yet I do not like their associations; or rather the lack of proper associations.

But another phase of the matter here enters. There is no doubt but flowers brighten any room except it be overful of grossly gaudy articles and objects, and then, strange to say, they act as a neutralizer and subdue and simplify the contents of the room as a whole, being the only natural and really beautiful object (perhaps) present. Thus they are never quite out of place in the house except too many or too many colors are used. So we will admit that cut flowers are always admissible if number and colors be well balanced and harmonious.

Comes then another consideration. The garden should be so full of flowers that those taken into the house will never be missed. A garden may have too many flowers for the size of it, but it would have to be very crowded indeed before such an impression would strongly appeal to the casual observer. But let us grow such an abundance of flowers that any quantity plucked for the house would not rob the garden of anything needed therein. This plan of procedure will not necessitate any considerable expense for we will grow plenty of good common sorts that cost but little outlay in money or time in care.

And now, as the old-fashioned parson was wont to say, we come to our fourthly (and let us hope the last?) Do not some plants, as well as some gardens, have too many flowers? Before cutting, give the garden a good "look over;" see if there is not a part, or a plant or plants that have too many flowers. If so, and we take some of them we thereby benefit the garden as a whole. Really, the plant that is literally a mass of flowers is more or less of a monstrosity and is seldom as beautiful as one where many flowers nestle down in settings of appropriate green foliage. For too many flowers, like hope deferred, "maketh the heart sick." Wealth of bloom is not always a wealth of beauty. For it is not quantity alone that gives you great joy; there must be quality. As a group of precious stones needs an appropriate setting (though one alone may require none) so do jewels in flowers need surrounding masses of appropriate foliage. Also please remember that some plants require to be systematically and continuously robbed of flowers or the latter will very quickly pass into seeds and the plant will cease to bloom and put forth its whole effort in perfecting its seeds. For in the latter lies its only chance of reproduction, toward which the supreme effort is aimed.

Mr. Kunderd reports that there has been a large number of replies to his special offer in the April number of THE FLOWER GROWER in his page ad in which he makes a very liberal offer for increasing the membership of the American Gladiolus Society. We would call attention to this advertisement again to urge that those who have not already become members of the American Gladiolus Society still have time to do so on Mr. Kunderd's offer until May 10th. Gladiolus enthusiasts should show their enthusiasm and aid the good work at the same time by joining the society.

## “Gladiolus Studies II.\* Culture and Hybridization of the Gladiolus.”

BY ALFRED C. HOTTES.

A Review by S. E. SPENCER.

[Written expressly for *The Flower Grower*.]

ABOUT FIVE YEARS AGO the members of the American Gladiolus Society and some other experts and growers received question blanks from Mr. Hottes, then in charge of the Gladiolus trial grounds at Ithaca, covering a wide range of topics relating to the culture of Gladioli. The information thus obtained and his experience of four years in the trial grounds forms the basis for this pamphlet of 270 pages.

The opening chapter discusses the Gladiolus as a cut flower and we note an interesting sentence in a quotation from an article by Mr. H. H. Groff: “One of the reasons for the popularity of the Gladiolus as a decorative flower is the fact that it has no perfume.”

Well deserved praise is given Mrs. B. H. Tracy for her original and artistic methods of arranging cut spikes for exhibition, and several planting suggestions are given for combinations with other flowers such as Hyacinthus Candicans, Iris, Phlox and Roses. In discussing the choice of soil the questionnaire shows an almost unanimous preference for light or sandy loam, bulbs to be covered four to six inches deep.

In regard to fertilizers there is the widest diversity of opinion and practice. Potato phosphate, sheep manure, bone meal, wood ashes and well rotted stable manure are all good, and the editor remarks that “the condition and cultivation of the soil are quite as important as the chemical analysis.”

One peculiarity of Gladiolus blooms is the variation in the arrangement of the segments. This is called “æstivation” and is due to hybrid origin. The first arrangement brings the uppermost segment or petal inside and on the same spike we often find the order reversed bringing the lowermost petal inside. When the flower has a blotch (as *Mrs. Frank Pendleton*) this causes a marked difference in the appearance of the flowers as the first arrangement gives us two blotched petals, the second only one.

In addition to a full range of colors in Gladioli, red, white, yellow, purple, blue and all intermediate shades, they show a remarkable variety of markings and color combinations.

The markings are described as dots, stippling, (very fine dots) splashes, (long irregular patches of color) feathering, (fine marking originating at the outer edges of segments) mottling, (irregular spots) blotches, (regular large areas of color found on the lower segments) penciling, (fine lines in the throat) suffusion, (colors laid on as though painted over another color)

marbling, (intermixed or clouded effects) blends, (gradual transition of one tone to another) and flecking, (small dashes).

A majority of the two hundred or more who responded to the question relating to the ideal flower are in favor of medium large wide open blooms of clear distinct colors, light shades for the flower market and more reds and darker tones for outdoor effects. Many approve curved stems, side branches and double flowers.

Probably the most interesting part of the book for experts and growers is the chapter on “Hybrids and Hybridization.” “A hybrid is the offspring of a cross between individuals of a distinctly different nature,” and “The first record of the crossing of plants was in 1719 when Thomas Fairchild, an English gardener, crossed a Carnation with a Sweet William.”

It is at once apparent that the modern Gladiolus is a “multiple hybrid” having been developed by the crossing of many wild species, and the resulting varieties crossed and recrossed till there is scarcely a trace of the original stock, consequently the Mendelian law of heredity does not apply except in a general way.

A chapter on “Crossing Technique” brings out many interesting suggestions. We note that in the grounds of the Bureau of Plant Industry at Washington the workers carry the pollen in a small tube attached to the left thumb by a rubber band. Breeders use small brushes, sticks, penknives and forceps for gathering and applying pollen, at any convenient time of day as soon as the pistil of the receptive flower is fully developed. The editor insists that careful emasculation and tagging of the parent flower and a record of the work are essential to accuracy, and the blooms should be covered to protect them from pollen carried by bees or the wind.

Opinions differ as to the desirability of the further use of wild species. Groff says, “The only value that any wild species can have to a breeder for practical results is as a foundation for laboratory stock, to be discarded yearly with their early hybrids as he advances step by step toward his ideal.” The editor and others favor the use of wild stock for the purpose of obtaining new types and colorings. When we consider that only about a dozen have been used for crossing and then think of the remarkable results that have been produced by the use of one wild species, the *Primulinus*, we must admit there is still a good chance for many surprises.

Every grower has a method of his own for raising seedlings. Mr. Douglas starts the seed in a hot bed, Mr.

Fuld in a greenhouse in December, drying out the little corms ready to plant in the field in May thus saving a year. Thomann sows seed in flats early in March and moves them out of doors when weather permits. Mr. Wilmore plants in trenches ten inches deep. Mr. Betscher removes an inch of soil from a bed, sows the seed thickly over the entire surface and covers with soil, using burlap mats or carpets to cover the surface and keep the beds moist. “Never let the seedling bed get dry.”

The product of a seed is a corm, it has the same soft husk or tunic as the larger ones. Botanically speaking, a bulb is made up principally of thickened scales, as the garden lily bulb, and bulblets grow on the stem above ground. The thickened part of a Gladiolus stem is, strictly speaking, a corm and the small hard shelled offsets are cormels, but the general public is not proficient in botany and the more general terms “bulbs” and “bulblets” are in common use.

The propagation of named varieties would be very slow if it were not for the small cormels so freely produced by both large and small corms, consequently the success of commercial growers depends largely on the ability to get results from this part of the stock. In field culture not over twenty to forty per cent of the cormels grow. Peeling the hard shell is recommended as insuring a vigorous and certain growth, and is practical for small numbers of choice cormels but they should be planted at once or stored in sand to prevent mold. Larger quantities may be soaked for a day in warm water to soften the hard shell. They should be planted early while the ground is cool and moist and harvested before the tops turn brown.

Corms of all sizes should be stored in shallow trays in a temperature between 40° and 50°, not too damp or too dry, any place suitable for keeping potatoes will be all right for Gladioli. If the air is too dry cover them with sand or fine dry loam.

The chapter on “Indoor Culture” gives suggestions for growing under glass both early and late varieties. Colvillei and Nanus stock may be potted not later than Dec. 1 and transferred to the benches or planted in the benches between the rows of some early flowering crop as Carnations.

Of the late or garden varieties the light colored sorts are preferred. In all cases they must have a period of rest before being started in growth again.

Mr. Cowee says: “In solid beds I have produced excellent spikes in 90 days with the earliest varieties but among Carnations it usually takes from

[Concluded on page 57.]

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## The Flower Grower

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*Special favors to none, and a  
square deal to all.*

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Vol. V

May, 1918

No. 5

"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### The True Mission of Flowers.

The real purpose served by flowers and flower growing is not, we believe, well understood. Many people think that flowers are for their decorative effect, and perhaps others, if they have a liking for display, may think that flowers are for show only.

Read the quotation at the head of the editorial column by the celebrated Persian philosopher Zoroaster. Those who cultivate flowers certainly accumulate a quality which may be expressed as "religious merit," or by other words; but it is an intangible quality, which while not well understood, it is there just the same. The refining influence of the presence of flowers is understood by all.

Just now the world is occupied by the bloodiest and most righteous war that ever was waged, and there are those who predict that there will be a great spiritual awakening after this war is over. Such a movement is certainly about due as the so-called civilized life which people have been pursuing during the past few decades has drawn them away from the higher and finer things and a renaissance is certainly due to correct this unrighteous and demoralizing tendency.

Flowers are one of the better things of life, and one which cannot be neglected except to the detriment of the finer human qualities and, therefore, we should grow flowers and still more flowers even though this is war time. Flowers are not the thing to be given up, but rather those frivolous and unsubstantial things which have no educational or spiritually uplifting qualities.

MADISON COOPER.

### Advertising Value of "THE FLOWER GROWER."

I desire to speak a good word for your advertisers. I bought Gladiolus corms this season all across the country from Natick, Mass., to San Gabriel County, California. Not only were all the orders promptly filled but in each instance good sound corms were sent. The prices were far more reasonable than those listed in the ordinary catalogues and the quality of bulbs just as good. Before seeing your pub-

lication I used to buy from the General houses instead of purchasing from the specialists. While their bulbs were always what they were advertised to be the prices were higher. I have saved by buying through your columns many times the subscription price to THE FLOWER GROWER and have had in addition the very great pleasure and the vast information that its reading matter affords.

T. DABNEY MARSHALL.

### Vitality of Gladiolus Seed.

So far as known to the Editor no exact information has up to the present time been published on the length of time that Gladiolus seed may be kept and retain its germinating qualities. We carried over seed from the fall of 1915 and planted some of it in the spring of 1916 with good results and then again in the spring of 1917 with good results. We were under the impression that it would lose vitality from year to year and had little confidence in it for the spring of 1918. Mr. H. E. Meader, of Dover, N. H., who fortunately has a green-house, offered to make a germinating test and we supplied seed for this purpose and this is what he says:

"The seed experiment was a success. January 4th I sowed one-half the quantity in a small flat, watered well and placed in a warm corner in rose-house.

"The same day, the other half of the seeds were put in warm water and kept in soak at a luke-warm temperature for 24 hours, then sowed beside the unsoaked seed in same box. By Jan. 16, first five shoots were up, followed the next day by twenty more. They are still coming, and average as high in germination as fresh seed as far as I can see.

"Strangely enough, the first to show up were the unsoaked seeds, those on the other side following suit one day later, so evidently soaking did not hasten germination at all.

"This proves, evidently, that seed three years' old fully retains its germinating qualities, perhaps still older seed might, in great part, hold its vitality."

It is our intention to carry over some of this same seed for another year or two and we hope to get Mr. Meader to make another test or two for us. Can anyone at this time throw further light on the subject?

There was an editorial in THE MODERN GLADIOLUS GROWER many moons since entitled "Cut Flowers Versus Bulbs." It was based on the text: "Wouldst thou both eat thy cake and have it?" Perhaps Gladiolus growers have noticed the fact that when they cut a fine display of bloom, it sometimes happens that their bulb crop is proportionately short, and vice versa; some years when bloom is scant the bulb crop is exceptionally good, and the bulbs large and well developed. We do not suggest that it necessarily follows that a good crop of cut bloom is followed by a poor bulb crop, but it is quite likely to be the case. This idea is offered out of the Editor's experience and we will be glad to hear from others along this line. It is surely our experience that a big lot of flowers often is followed by an inferior crop of Gladiolus corms which is necessarily depended on for the bloom next year. The past year it was especially noted that several varieties giving inferior flower spikes produced a fine crop of plump and healthy corms.

We learn that spikes of Gladiolus *Myrtle* from California received in Chicago during April are unusually large in size as compared with the spikes of this variety as grown in the East. We presume that this is owing to California conditions where it is much easier to get size. Under the tropical conditions of California luxuriant growth is readily obtainable.

## WAYSIDE RAMBLINGS

### LIFE HISTORY OF A GLADIOLUS CORM.

I have read carefully every issue of your magazine, *THE MODERN GLADIOLUS GROWER*, since its beginning and not only have I been profited by so doing, but I have been much interested in certain opinions and discussions regarding the life era of the individual Gladiolus bulb. The commercial grower and the florists recommend the young vigorous bulbs grown from cormels, but while they are most sure to give satisfaction it is no proof that older bulbs will not do as well if given proper care. I never see an old wrinkled, exhausted bulb without beholding in it a tragedy. It ought not to be so for given proper surroundings with available food each bulb has the inherent power of revivifying itself in a new bulb annually.

While planting this morning some bulbs of the variety *Contrast*, I was impressed with the size and vigor of them and I thought of the years they had bloomed for me. Going to my planting guide I found I had received the bulbs in the spring of 1906, twenty-five of them. Everyone acquainted with this lovely variety knows they are scant producers of cormels. What increase there was in that line I either traded or gave away, never trying to increase my original stock of 25 bulbs. I am positive that scarce a single bulb has grown old and died, very rarely one would split into two bulbs much smaller than the parent but large enough to bloom the next year. By that means my stock was increased slightly. I gave a few bulbs away and upon actual count today I still have 23 fine large bulbs. The following spring, 1907, I bought some bulbs of the variety *Capt. Falconer*, the color of which I much admire. Every year they have bloomed for me but today I still have the same number of bulbs, never having a division nor a cormel. I mention these two varieties especially because of all the varieties appearing before the advent of Gladiolus *America* I liked these two the best and starting anew with *America*, *Panama* and *Niagara* as my favorites, I abandoned all that went before except the two above mentioned.

In the last issue of your magazine you call for special tabulated experience in the matter of whether bulbs grow old. I will watch with much interest further opinions of men who ought to know.

I am going to ask a favor of you in behalf of the Iris lovers and it is that you publish sometime from the pen of some one with experience, the proper care of *Rhizomatous Iris*—subdivision *Oncocylus* variety—*Susiana* or *Mourning Cloak*. They are usually grown in frames but we are often told to treat as tulips. They are so beautiful that if they can be handled as tulips the Iris lovers ought to know it. Who can tell us?

JOHN H. NEELEY.

### SHRINKAGE OF GLADIOLUS CORMS IN STORAGE.

In order to know something about the shrinkage in measure and weight of Gladiolus corms, I measured and weighed a corm of *Golden Measure* at three different times: Oct. 30, 1917, Dec. 14, 1917, and April 8, 1918. The circumference and weight were as follows:

	Circumference	Weight
Oct. 30, 1917	11 $\frac{1}{4}$ inches	6 $\frac{1}{4}$ ounces
Dec. 14, 1917	11 $\frac{3}{8}$ inches	5 $\frac{1}{2}$ ounces
Apr. 8, 1918	11 inches	5 ounces

The corm was kept in a dry cellar at a temperature generally ranging from 50 to 60 degrees. In a cellar not so dry and warm the result doubtless would have been different. It is interesting to note that while the shrinkage in circumference in the first 45 days was the same as during the following 115 days, the shrinkage in weight in the first 45 days was 50 per cent more than in the following 115 days.

C. C. MILLER.

#### Note by the Editor

Dr. Miller gives us some exact information on a subject which has not to our knowledge been covered before. The information would be more complete, however, had he stated how long after digging the first weights and measurements were taken, as no doubt the greatest shrinkage takes place during the first few weeks after digging. In fact, during a warm dry time, shrinkage during curing in the field is sometimes quite heavy. Our own experience is that early dug corms will shrink much more than late dug corms, assuming of course that they were both planted about the same time.

### RHODODENDRONS

They are not supposed to be hardy enough to endure our severe winter, yet I have had one bloom freely for six seasons. The way I protect them is thus: I work dry leaves all among the branches, and then cover them with paper which must be of the best quality. It is formed into a cone, and placed over the plant. I then give it a good covering of straw. When straw is not obtainable they can be covered with June grass sod. The entire plant should be covered with the sods. This may seem like quite a task, but a good sized plant can be covered in a short time.

The leaves are essential for if they freeze at the roots it seems to injure them.

WILLIS E. FRYER.

### A POTATO PLANTING EXPERIMENT.

For the benefit of those cultivating a war garden this year, will relate an experiment in potato culture:

For quick returns we naturally select an early variety which at this time, if having been stored in moderately warm and light cellar will have healthy sprouts. If they have not already

sprouted place them where they will have light and warmth and they will soon sprout. We then proceed to cut the potatoes into pieces so each piece will contain one or more eyes or sprouts. One potato will very often make several pieces.

The first row was planted with potatoes on which thick heavy sprouts had been left when cutting. Each piece of potato was placed in the row carefully with sprout up. Next row, potatoes had been sprouted and each piece was placed with eye up. Next row was dropped just as they might from a planter. All were covered carefully. Potatoes planted were all same variety; planted April 15. The result was, when first row was blooming, second row was about six inches high and third row was just coming through the ground.

June 20, first row was ready for market and on display at meeting of Stark County Horticultural Society.

It really pays to be just as careful in planting potatoes as well as other vegetables for best results.

MRS. J. L. POWELL, (Ohio.)

### SEEDLING EXPERIENCE IN CALIFORNIA, 1 YEAR FROM CROSSING TO FLOWERING.

July, 1916, flowers crossed; August 1916, seeds gathered; Sept. 1916, seeds planted; Jan., 1917, little cormels dug; Feb. 1917, replanted in new bed; July 1917, part of them bloomed.

C. M. S.

Surely only a tropical climate makes it possible to have Gladiolus bloom one year from the planting of seed. This is a very unusual experience, but it shows the possibilities.—Editor.

### NEW SOIL FOR GLADIOLI EACH YEAR.

I make it a point to change my Gladiolus field each year. The chief reason is to avoid getting stock mixed by "volunteers" or the germination of corms or cormels left in the ground in digging. Another reason is to avoid the increasing of disease which may be in the ground.

W. D. PITCHER.

### Brooder House for Curing Gladiolus Corms.

Our correspondent, who suggested the using of his brooder house for this purpose, reports the best of success, and that when cleaning them he found less loss from dry rot than he had before, when the corms were cured in the open air.

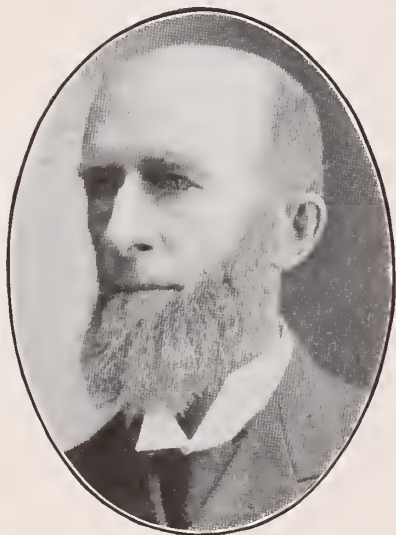
It is, of course, difficult in the north to secure enough dry weather and sunshine to properly cure Gladiolus corms at digging time, especially towards the end of the digging period in late October or early November. Our correspondent reports that with his brooder house stove going, and a circulation of air through the cloth covered windows, that the bulbs in from four to six days were dried about right, and ready for storage. He reports the brightest looking lot of bulbs that he has ever had.

## Matthew Crawford.

Noted Horticulturist of Northern Ohio Called to His Great Reward.

GLADIOLUS growers everywhere will regret to learn of the death of Matthew Crawford, for half a century well known as a horticulturist and especially for his work with the Gladiolus.

Mr. Crawford was stricken with an attack of pneumonia and succumbed after a three days illness at the home of relatives in Belle Center, Ohio. He



MATTHEW CRAWFORD.

had made his home there since last fall and at the time of his death was making arrangements to go to Chicago to be with his son, William Crawford, well known as an insurance man and publisher of an insurance magazine.

Mr. Crawford was born in County Antrim, Ireland, in 1839, and was, therefore, 79 years old at the time of his death. His father died when he was quite young and at the age of ten, he with a younger brother came with their mother to America, settling in Ohio. About 1850 the family moved to Cleveland and in 1856 Mr. Crawford

began work on a large market gardening place. From that time on Mr. Crawford devoted his time to horticulture and made it his life work. He was an authority on soil improvement, not only throughout Northern Ohio, but in many adjoining places and had written much for publication on horticultural lines.

Mr. Crawford was known as the Gladiolus King of Ohio and he had earned this title in years gone by, by his energetic work in the improvement of this beautiful flower. He was constantly experimenting with new varieties of fruits, flowers and vegetables, specializing in strawberries and Gladioli. Since the early eighties he had been a grower of Gladioli commercially and it is stated that at one time he planted as much as 50 lbs. of seed in one season. This seed it is also understood was practically all of the Gladiolus seed that was available during that particular year in both Europe and America. In addition to his work in growing seedlings and bulbs for market, he also did a thriving business in the shipping of cut flowers to the city markets. In this work he was a pioneer.

Since the death of his wife, killed by an interurban car in Cuyahoga Falls in 1916, Mr. Crawford had spent considerable time among relatives and gradually disposed of his bulb business. He was one of the charter members and past master of Star Lodge of Masons, a member of the Congregational Church and a teacher in the Sunday School for many years. He is survived by one son, William Crawford, of Chicago.

In the January 1914 issue of THE MODERN GLADIOLUS GROWER which by the way was the first number issued, we printed a brief article on the occasion of the Golden Wedding of Mr. and Mrs. Crawford.

Mr. Crawford in connection with Dr. Van Fleet was the author of the book called, "The Gladiolus," published in 1912 the only bound book on the subject of Gladiolus growing.

bering several hundred named varieties, have been produced from varieties native of China.

Peony seed ripen in late summer and if planted at once or kept moist until late and then planted come up the following spring. If the seed are allowed to become dry before planting they will lay in the soil a year longer, coming up the second spring after planting.

Single flowered Peonies produce seed much more freely than the double varieties, and seedling Peonies are not to be despised with flowers of all shades of color from pure white to all shades of pink to crimson, sometimes six or seven inches in diameter, singles bloom rather more profusely. E.

### The Glad Philosopher's Musings.

"Never leave that till tomorrow which you can do today," is the way Benjamin Franklin penned the proverb, that, written in his copy book, has been instrumental in causing many a laggard school boy of slothful disposition to adopt habits of punctuality and promptitude.

I have in mind a shiftless farmer acquaintance who is ever promising but seldom performs. He is always "gonna do" this or that, but never gets the thing accomplished. His implements and farm machinery are left out in the fields where he used them last, exposed to the elements, to rust and become worthless in a short time, when they might serve him a score of years or more if properly housed in the shed he is "gonna build someday"; the old farmhouse is about ready to tumble down because he has not yet got around to make the needed repairs; his wife has a life of drudgery because he continually puts off installing the improvements that he is someday "gonna get" for her. Sometimes I think it is part of the all-wise plan that we have in every community an occasional defective or profligate to serve as a "horrible example" for the teaching of the young. Some such reminder as, "Do you want to grow up to be like old Tom Jones?" has probably set many a listless youth to thinking, and helped to throw off a growing habit of vice, or conquer an inherent tendency to indolence.

There is a seed time and a harvest time—a planting time and a blooming time, and whoever would have success with flowers must not procrastinate too far beyond the proper time to plant or reset. I have certain friends who get quite enthusiastic at blooming time and express resolutions to plant "some of these next spring," or set out "some of those next fall," but when the right time arrives for doing it they are either too busy with something else or have forgotten the resolution. As there is a best time for every operation in growing things, and as what is worth doing at all is worth doing well, it pays to learn when that best time is, and then act. He who is continually saying, "I forgot," has to be ever apologizing for his failures and omissions. The person who puts off ordering seeds, bulbs or plants until after the best time for planting them has passed, not only has to run a greater risk of success, but often has to take inferior goods, because the wise and prudent customers who ordered early have already had first choice, and only culls remain.

The gardener may consider it no disgrace to have both lice and bedbugs—lice on the rose bushes and bugs in the flower bed.

Next in meanness and moral depravity to the wife-beater, the anonymous letter-writer and the dog-poisoner,

### Peonies from Seed.

[Written expressly for The Flower Grower.]

The finest Peonies as a rule do not produce many seeds. I have had about an acre of ground closely planted sometimes with choice Peonies, in about 100 named varieties that did not yield a gill of seeds. Another year there might be a quart. I have had *Officinalis Rubra Plena* in cultivation more than 60 years and, although seed pods are formed freely, I never could find a single mature seed. This, the "Piney of our Grandmother's Garden," is one of the most beautiful of all varieties, and was introduced in English gardens more than 100 years ago. The finest Peonies of the present, now num-



are the petty thieves who steal flowers. At night, these conscienceless, craven miscreants carry away potted plants from verandas; they do not hesitate to lift newly set plants from porch boxes; and I have known of cases where they even removed flowering plants from graves in the cemetery. What punishment could be severe enough for such depraved human ghouls? Let us trust satan, at the great final reckoning, to have something fit.

THE GLAD PHILOSOPHER.

### Climbing Roses.

(Continued from page 51.)

as it passed a station not far from Philadelphia, I saw a lovely sheet of pink bloom made by *Dorothy Perkins* Roses all along the sides of the cut through which the track ran. Here was another fine Rose use.

I ought earlier to have explained a basic difference between the so-called ever-blooming or hybrid tea Roses and the hardy climbers. The former produce flowers on the growth of the same season, from the ground or from existing stems; indeed, they tend to make buds always as they grow, and if they can be kept growing they will keep blooming all the summer. In spring they are properly trimmed down rather closely, to induce the quick growth which means quick bloom. They will have some flowers even if cut to the ground.

The hardy climbers now in use are of different habit. The bloom shoots for the June shower of Roses arise from the canes or shoots of last summer's growth, and less freely from the older canes. No flowers come on shoots of the current season. Consequently, they are best pruned immediately after they bloom, rather than in the spring, save for the removal of any end shoots that have been frost-pinned in winter.

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I trust the Rose-loving mothers who have followed thus far will see new uses for the lovely climbing Roses now available. In the corner of the shrubbery; fronting the vegetable garden; the Rose pillars marking certain path entrances; a "Rose-fan" trained out upon a trellis visible from the window most often looked from; a sloping bank covered with a tangle of climbing Roses treated as trailers; these and other Rose adornments will have proposed themselves, I am sure.

Now I may well take up the varieties of these newer climbers which I am so anxious to have begin their proper work of home glorifying in the spring of 1918. The old *Crimson Rambler* has served its turn, and the far better *Excelsa* should be planted instead. Of pink climbers, *Lady Gay* and *Dorothy Perkins* are both good, and I cannot tell them apart. The good Rose *Farquhar* comes a little earlier, and looks like the last two. *Mrs. F. W. Flight* is a more definite pink, and a marvelous bloomer, in its once-produced but long-enduring mass.

*White Dorothy* is just what its name implies, and is both lovely and reliable. *Mrs. M. H. Walsh* is also white, and is peculiar in its trailing disposition, though it may be used to climb. It has the advantage that its foliage turns to a rich purple-bronze color before frost takes it from the plant. *Tausendschon* is the one best climber of this cluster class, and it can be called both pink and white, for it is both. Its growth is different, and it is thornless.

*Goldfinch* is a good cluster yellow, but its hue fades to primrose when the buds open. *Gardenia* is lovely, but *Aviateur Bleriot* is more so, for it has buds of such dainty apricot beauty, so delightfully perfumed, that visitors to my garden always prefer it to more showy sorts.

All those just mentioned, save *Aviateur*

*Bleriot*, have small flowers in large clusters. The newer class having large flowers, and sometimes clusters of them, includes *Climbing American Beauty* for crimson, *Dr. W. Van Fleet*, *Christine Wright* and *Miss Helyett* for pink, and *Silver Moon* and *Purity* for white. All are fine, and all hardy to the latitude of Rochester, but not of Chicago without protection. Like the other rambles, they do not seem to prosper in the far south, where the rest given by winter's cold is denied them.

The single climbing roses are, to my mind, altogether worth while. Professor Sargent, the most acute authority on hardy plants, seems to think that *American Pillar* is the most beautiful Rose ever grown in this country. *Hiawatha* and *Leuchstern* are close to it, while *Paradise*, *Milky Way* and *Evangeline* also are lovely. *Sargent*—the Rose, not the man!—seems to me like a glorified apple blossom. Indeed, there is a lovely simplicity about those single Roses that most highly commends them.

There are climbing forms of some of the hybrid teas, but they are not reliably hardy. Many other hardy climbers are in the catalogues, and they are probably of merit. I have, however, written only of those I know about, it being a rather settled conviction with me to tell of what I have personally tried, rather than of what I have read or heard. Certainly within the list I have given there is ample choice of color, habit and form, to break the monotony of seeing in the June countryside only two or three climbing Roses!

J. HORACE MCFARLAND.

T. Dabney Marshall, of Mississippi, author of the article in the February issue entitled, "A Roseless Garden," makes some interesting statements as to the advertising value of THE FLOWER GROWER on page 54.

It is really strange and surprising how few people really read on a subject in which they are vitally interested. It is probably a fact that many flower growers who spend a large amount of money each year in the purchase of new stock for planting, do not subscribe for any sort of a floral publication and do little or no reading on this subject except what comes to them in the daily papers and we know how inaccurate and meagre this is. Those who subscribe for and actually read a publication devoted exclusively to flower growing have an advantage over the non-readers which is many fold. But read what Mr. Marsh says. He has expressed it in a few words and much more concisely than we are able to and besides, his statements have the weight of actual experience.

### Gladiolus Studies II.

(Continued from page 53.)

98 to 105 days." They do not require a high temperature, 50 at night and 60 day, and later 5 warmer will give best results.

Under "Insect and Animal Pests," mention is made of red spider, the greenhouse pest which is especially troublesome on Colvillei, and wire worms, which eat the corms, and aster beetles and moths which are sometimes troublesome above ground.

"Gladiolus Diseases" have been discussed in the first article of this series, in the April number.

### Cutting Gladiolus Corms Before Planting.

One of our subscribers reports the best of success in cutting up some old flat Gladiolus corms. He states that he never had a better stand. Some very small flat corms were cut in two pieces, and the larger ones were cut into three and four pieces. Every piece produced a fine corm and two of the pieces produced two corms each, and several of the plants produced a few cormels.

This plan of cutting Gladiolus corms to an "eye" is a valuable one for the rapid increase of new or rare varieties. It is based on the fact that each "eye" draws more nutriment if planted singly than if the corm is planted entire. It simply gives a greater area of fertility for each individual "eye" to work on

Joe Coleman, of the Austin-Coleman Co., Wayland, Ohio, on seeing the illustration of a divided flower spike of *Evelyn Kirtland* in the April issue, writes that he noted this characteristic of *Kirtland* in their fields last summer and marked a dozen or more spikes, but the record was lost at digging time. This may be a trait of this particular variety which can be fixed by selection.

Statement of the Ownership, Management, Circulation, etc., required by the Act of Congress of August 24, 1912, of THE FLOWER GROWER published monthly at Calcium, N. Y., for April 1, 1918.

STATE OF NEW YORK }  
COUNTY OF JEFFERSON } SS:  
CITY OF WATERTOWN }

Before me, a Commissioner of Deeds in and for the City, State and County aforesaid, personally appeared Madison Cooper, who, having been duly sworn according to law, deposes and says that he is the Owner of THE FLOWER GROWER and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher—Madison Cooper, Calcium, N. Y. Editor—Madison Cooper, Calcium, N. Y. Managing Editor—Madison Cooper, Calcium, N. Y. Business Manager—Madison Cooper, Calcium, N. Y.  
2. That the owner is Madison Cooper, Calcium, N. Y.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are:

None.  
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

(Signed) MADISON COOPER.

Sworn to and subscribed before me this 28th day of March, 1918.

[Seal.]

(Signed) LORIS C. DENNY, Comm. of Deeds.

(My commission expires Dec. 31, 1918.)

Information comes to us from a friend in England which indicates that plants and bulbs of French origin may now be imported into the United States without any special license.

#### CLASSIFIED ADVERTISING.

Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.

**WANTED** Black Bulbets of Niagara, Panama, Peace, Pendleton, Primulinus Hybrids, Schwaben and War. Submit samples with price per gallon or bushel. THE TEMPLIN-CROCKETT-BRADLEY Co., Sta. A, Cleveland, Ohio.

**GLADIOLI**—Planting stock of America and Mrs. Francis King, ¼ to ½ inch; 10,000 of each at \$1.50 per thousand; 300 Niagara, 1 to 1½ in. at \$3 per hundred. Cash with order, please.  
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GEO. S. WOODRUFF, Independence, Iowa

# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 6

June  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

### The Joys of an Old-time Editor.

[Written expressly for *The Flower Grower*.]

BY LORA S. LA MANCE.

Note by the Editor -

Mrs. La Mance has had so much experience as an old-time floral editor, that we asked her to write us in a reminiscent way and we know that many of our older readers will be interested. We are in hopes that Mrs. La Mance will contribute still further along the lines of the present article.

YEARS AGO I was joint editor of the *Mayflower*, published by the well know florist, John Lewis Childs. One of my duties was to answer floral correspondence. In those days a thousand questions, wise and otherwise, used to be asked the editor. Pending my acceptance of the position, all letters were laid by for me. When I finally accepted, the publisher sent an express package that contained 221 letters by actual count. Mr. Walter M. Pike, the former editor, sent this laconic message "May the Lord have mercy on your soul!" In less than a week I had every one of them answered.

I enjoyed the Question Box. There was a suspicion at times that some of the writers sat up nights to think up queries. One woman asked about forty-one different flowers, and wanted full cultural directions, as to size of pot, kind of soil, how often to water, and whether to use fertilizers, for each and every one of the 41. One man asked what was the meaning of "earth," "soil," "ground" and "dirt" as used by floral writers. One daring man asked how the green Rose was secured, "did one have to graft Tea Roses onto a willow bush to get green flowers?"

I was asked about "Sword Lilies," "Hooded Lilies" and "Nigger Lilies," all aliases for Gladioli. People wrote about basket geraniums, sycamore

geraniums, spider geraniums, holly-hock geraniums, oak geraniums, corn geraniums and a dozen other "Geraniums" that were not even remotely

connected with the pelargonium or geranium family. Ladies said rose-moss when they meant portulacca, rose vine, meaning *Calystegia pubescans*, rose tree, meaning althea, and "Yellow Rose of Texas" when they mean *Rudbeckia*, the common golden glow. I soon had a list of over 1000 fanciful names given to garden flowers and pot shrubs.

Some of the letters were so jolly! Sam Weller wrote a whimsical account of the one who "sang in early mass on Sunday morning, but wound up the day by dancing a Spanish fandango in the cabaret." Phoebe Wescott Humphries scraped up a common ancestor 300 years ago. One man, who had sent three long and tiresome letters asking about every bug pest in creation, and called for insecticoids formulas galore, rewarded his editor's patience by sending a proposal of marriage!

Mr. Childs made a hobby of "feature" articles. It took months of steady preparation to get out a *Begonia* number or *Lily* number, or one on night bloomers, or on *Cacti*, or *Chrysanthemums* or *Holland bulbs*. We thought it paid. It was a miniature cyclopedia on that certain subject. How we had to cram for it!

The dear old colored plates that pictured flowers in a riot of color loveliness, are gone forever. The long, flowery and sentimental contributions sent in by "Smartweed," "Black-eyed Susan," "Nemo" and "Brother Solomon," are a thing of the past, also. Everything is boiled down now-a-days, concise and to the point. Probably it is well

(Concluded on page 67.)



Gladiolus—Snapdragon.

One of A. E. Kunderd's novelties, named because of its remarkable form. It has a tall spike and a fair size flower. The color is a bright red border with a large, rich, pure yellow throat. *Snapdragon* is beautifully ruffled and exceptionally distinct as a variety.

## Delphiniums.

BY WILLIAM TOOLE, SR.

AMONG decorative plants for outdoor growth there is probably no class more broadly useful than are the Delphiniums. Botanically the name includes a number of species with hybrids and crosses of both annuals and perennials. Custom is leading to apply the name Larkspur to the annuals and Delphiniums to the perennials, although they are all Larkspurs and all Delphiniums.

In this article I chose to consider the perennial section. We may, as a class, place them at the head of all the blue flowers,

resembling of a bee crawling into a flower.

Among the newer creations classed as hybrids, especially among the doubles, we are given some wonderful combinations of shades, including blues and purples with changeable rose with or without white centers and hues which are indescribable.

From seed we are not yet able to secure pure whites of this class, although there is a white variety to be had which continues scarce, because it must be increased by division.



whether for decorative planting or cut flowers. Their coloring is not confined to blue, although that shade predominates. Among blues probably the Belladonna class is the generally favorite. The combination of light blue and white takes the lead, but some lovely shades of bright and dark blues of this class are being developed. If the fading flowers are removed the Belladonnas give a succession of bloom more quickly than others. There is a graceful inclination of the sprays to droop, which adds to their attractions.

The older Delphiniums, *Formosa* and *Formosa Coelestina* include nearly the same range of shades and markings as the Belladonnas. They are a little more rigid in outline of plant, yet we want them for their sturdy beauty. Because of old time associations we still like to see the old fashioned Bee Larkspur with its brown center, the

For length of spike of bloom and size of flowers some of the newer kinds both double and single are truly marvelous. The foreign growers send out named varieties which should be all alike in each variety but increase by division is too slow so choice selections of such of the varieties are scarce and after the first blooming those nearest to type are chosen to represent the kind named.

If seeds are sown early most of the kinds will produce flowers the same season.

There is a blending of pleasure and disappointment in raising Delphiniums from seeds. The disappointment comes so often from poor seeds. No other kind of plants more easily bears transplanting either in the spring or in the summer after the first blooming period. Because of storms it is well to be prepared to stake the plants, especially if they are grown in the shrub border. If grown

in the open with plenty of room for each plant they seldom go down.

There is a distinct section called Chinese, with smaller growth and more finely divided foliage. This class includes the Siberian. In this class may be had an abundance of clear white as well as various shades of blue and purple. If kept cultivated in the summer and given slight protection in the winter the Delphiniums are very enduring and will stay by one for many years.—From *Wisconsin Horticulture*, published by the Wisconsin State Horticultural Society, Madison.

### The Delphinium.

The improved Delphinium is a stately plant. Its spikes from four to seven feet tall supply our gardens with a wealth of bloom, from June until late fall, that would be sadly lacking were it not for these magnificent plants. They are the easiest culture, and thrive in any good garden soil. They are single and double, and all the shades of blue imaginable. Some have white, and others black eyes while others have eyes which look very much like a large wasp or bee.

*Moerheimi* is a pure white hybrid, and the best white yet introduced.

I believe in a row of seedlings ten rods long there would not be two exactly alike. If they are of the same color the eye or the form will be different.

If the spikes are cut down as soon as they bloom, others will spring up in their place and prolong the blooming season.

Last season many of my plants were broken off by the wind just as they began to bloom, and late in October they were a mass of blooms.

This is one plant which has never been injured by our most severe winters.

They can be planted from September until late fall or in the spring.

WILLIS E. FRYER.

### Germination of Fresh Seeds.

Much has been written lately on the subject of the rest period in seeds, and especially on the capacity of seeds of certain species to germinate without any rest period. The *American Botanist*, in reviewing the latter phase of the subject, states that in the case of the tomato seeds will sprout even when taken from green fruit. Beans often sprout in the pod if the late summer happens to be moist. The mangrove is remarkable for the fact that its seeds develop into young plants before separating from the parent plant. The same phenomenon occurs, on a less marked scale, in some of the oaks.

On account of long delay in printing the index of *THE MODERN GLADIOLUS GROWER* for 1917, we are not sending it out to all present subscribers, but it will be sent to anyone on request. Those who have a file of 1917 and need the index in connection with it, should let us know at once and we will mail them a copy.

## THE ROSE

### How to Get Rid of the Rose Bug.

The Rose chafer, or common Rose bug, one of the so-called May beetles, is probably the most persistently annoying and destructive pest of the June Rose garden, as it makes its appearance as soon as the Roses begin to bloom and continues its ravages well through the June blooming season. Unlike most other insects the chafer prefers petals to foliage and rapidly eats its way into the very center of the choicest flowers, completely despoiling them. It is a difficult pest to control, but there are several known ways to exterminate them and success will follow a persistent effort.

Spraying the Roses with paris green or arsenate of lead will kill the bugs, but it is rather risky to poison Rose blooms, and I would not advise poison except where it is known to be absolutely safe to use it.

Wood alcohol sprayed on the infested blooms with a fine atomizer will kill the bugs by contact. This is another dangerous remedy to use, as wood alcohol is highly volatile and its fumes are dangerous to the eyes, and one might seriously impair his eyesight, or possibly lose it altogether by being careless and inhaling it.

Mrs. Ely, in her book, "The Practical Flower Garden," gives a tested remedy which she obtained from the Garden Club of Philadelphia, and she vouches for its efficiency. It is a mixture of

Three pints of sweet milk, (may be skimmed);

Three pints of kerosene oil;

One quart of water.

Put the above in something that can be shaken, such as a demijohn—shake for a few minutes, add one-half pint of the resultant emulsion to a gallon of water, stir well and spray the Rose bushes, also wet the ground thoroughly over the roots, and apply it gently with the fingers to the buds. It should be used every ten days from May 1 to the middle of June. The larvæ live in the ground and feed upon the roots of the Rose bush, and the drenching of the soil with the mixture seems to prevent their hatching out.

Rose bugs can be easily shaken off into a can of oil, for when disturbed, unless well buried in the petals, they feign insensibility and drop off the flower. Their extremely long legs enable them to make a quick "get-away" so that hand picking embraces some element of chance, thereby appealing to the true sportsman! Hand picking is my own way of keeping the pest in abeyance. I carefully and persistently watch for the first ones to appear and destroy them by violence—generally "strafing" them between the sole of my shoe and any convenient stone or brick, not having any special device for the purpose, like, according to the familiar old story, the farmer boy who sent 25 cents in answer to the advertisement of a simple and absolutely sure potato

bug killer, and received by mail two blocks of wood with the instructions: "Place bug on one block and press firmly with the other."

H. G. READING.

### Snap the Sparrow.

[C. R. HINKLE in *Wisconsin Horticulture*]

The Bluebirds were calling loudly for help. I had heard the call before, when the pesky English Sparrows took forcible possession of the bungalow I had built for Bluebird tenants only, whereupon a new house was put up for Mr. and Mrs. Bluebird and, after several visits of inspection, they had concluded to take it and were moving in. And now they were appealing again, urgently, insistently, and evidently directly to me. What was the trouble? A brazen English Sparrow visitor on their front porch, uninvited and unwelcome! Something had to be done.

It was no use to try that rifle again, for the Sparrow is too wise to stay within gunshot and anyway that gun appeared to have a crooked barrel when used by me. So I borrowed my neighbor's sparrow trap, one of those big wire affairs, costing \$5 and highly recommended (by the maker). Result; two sparrows caught in three days and the Bluebirds still coming to me at intervals and telling their troubles. Something more had to be done.

I prepared for action and placed on the ground near the fancy trap half a dozen ordinary snap-spring mouse traps, of the "three for a nickel" variety, and I must confess that I looked furtively around to see if anyone was watching this seemingly foolish act. Result: forty sparrows in a couple of weeks, while the scientific trap was catching eight; the place free from the sparrow nuisance, except an occasional scout from another colony who never returns to tell his tale, and peace and harmony in the Bluebird home, where little Mrs. Bluebird is sitting and is being attentively fed by her devoted and industrious husband on "June-bug grubs" and worms from my *Gladiolus* Garden.

Not another bird goes near the mouse traps but I have had one woodpecker and one blue jay in the wire cage. Moreover one mouse and one gopher have been added to the list of victims of the mouse traps. I would advise, however, that they be set in the open pathways very near the house. Here the audacious sparrow does not hesitate to venture, while other and more modest birds might be protected by their natural timidity against the danger of the trap.

The U. S. Department of Agriculture issues Bulletin No. 493 entitled, "The English Sparrow as a Pest." In this is said: "The English Sparrow among birds, like the rat among mammals, is cunning, destructive and filthy. The annual loss caused by these birds throughout the country is very great. It reduces the number of some of our most useful and attractive native birds, as bluebirds, house wrens, purple martins, tree swallows, cliff swallows and barn swallows, by destroying their eggs and young and by usurping nesting places. It attacks other familiar species, as the robin, wren, red eyed vireo, cat bird and mocking bird, causing them to desert parks and shady streets of towns. Unlike our native birds whose place it usurps, it has no song, but is noisy and vituperative."

The sparrow is a scavenger; he comes around three times a day, after meals, evidently to pick up crumbs. Bait the trap

with a little pinch of bread,—let him try to pick it up. Snap! He gets it!

You "Swat the Fly," why not "Snap the Sparrow?"

### Lily of the Valley.

Beds of Lily of the Valley become crowded after a few years, and unless the crowns are replanted they become weak and fail to flower. Trench the ground and mix with it a liberal amount of decayed manure, leaf-mould, and if the soil is of a heavy, retentive nature, a quantity of old potting soil or sand. Lift the crowns carefully and select the finest for pot culture or for planting in special beds. Plant the crowns in rows made 12 inches asunder, and allow a space of 6 inches between the crowns. Small crowns planted in reserve beds will make good plants, suitable for putting into permanent quarters next year. Give the beds that were planted last year a light top-dressing of decayed manure and leaf-mould, after all weeds and rubbish have been removed.—*The Garden*, London.

### Flowers at the Creamery.

Oh shucks, some of the busy butter-makers will say, here is the same old story. But it is this way. Our good friend, John Grosser, buttermaker at Geneva, Minnesota, writes: "Would you please write something about flower gardens in the *Dairy Record*? Just now is the time to get the boys in line!" If you know Mr. Grosser, you know that he is very much in earnest in whatever he undertakes and that he practices what he preaches. He does plant flowers and cares for them, and his creamery grounds are known far and wide as being among the finest in the land. So we are glad to join him in his plea for a little beauty around the creamery and for the fine, healthy fresh air exercise the work furnishes the indoor worker. The "Creamery Beautiful" idea, in Iowa, where it has been put into a contest as well as in any other state, is not a fanciful dream by any means, but is a matter of real business value to any creamery. High grade butter means cleanliness, purity, fragrance and beauty, and real co-operation is built on fellowship of men, kindness and goodness of heart. Hence, the creamery, as an emblem, should stand in the midst of a lawn with shrubbery and flowers. As good advertising for pure butter, both to producers and consumers, there is nothing better and nothing cheaper.

And it is the finest kind of fun. We know. We, too, putter around on a lot every fine Spring morning from five to seven, dig and hoe and plant. Very amateurish, you know, lots of mistakes and all that, but we get pretty close to Mother Earth just the same and see the day while it is new and fresh, and watch flowers and garden stuff come up. It is fine for soul and body, there are no gasoline or tire bills, and far more thrilling than any cowboy or sob-story movie in five reels. Try it and see.—*The Dairy Record*.

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

### Music and Flowers of Other Days.

#### NO FLAG BUT THE OLD FLAG.

No flag but the old flag—the red, white and blue,  
With the stars of a Union unbroken and true;  
Arise and defend it! ye sons of the brave,  
Whose blood bought the banner your valor must save.

#### CHORUS—

The old flag, the dear flag, the red, white and blue;  
We rise to defend it and prove ourselves true,  
The old flag, the dear flag, the flag which you see,  
We're ready to die for the flag of the free.

Wo! wo! to the traitor who drags to the mire,  
The flag crimsoned deep with the blood of his sire,  
If he rouse up the legions on land and on sea,  
Who are ready to die for the flag of the free.

Up! up with the Stars and the Stripes, and go forth  
To save our great Union brave men of the North!  
No rest till the Star Spangled Banner you see  
Triumphantly float from the Palmetto tree.

God bless the old flag! as He ever has done,  
Since He strengthened the arm of our own Wash-  
ington;  
And God bless the free-men, devoted and true  
Who are ready to die for the Red, White and Blue.

Great clumps of lilacs flanked the steps between the large square posts and the wings—which were on each side of the main part of the house, and closed the ends of the porch—and afforded delightful seclusion from the highway. Looking up and over the lilacs at the left, could be seen the top-most boughs of tall twin wild cherry trees which I had christened the Guardian Angels because they had the appearance of hovering protectingly over our front yard. The yard was enclosed with a picket fence, painted white, built from the outermost corner of each wing toward the road to the wild cherry trees on one side, and to the drive from the road in on the other side. The corner of the fence near the drive was draped with festoons of a climbing rose we called the Eglantine. In the yard was a large shrub of the ordinary snowball, and clusters of flowering almonds. Sprouts of the old rose, Refulgence, came up thickly and opened their semi-double crimson blooms and when they faded, the grass was cut, with a scythe, usually just before the Fourth of July. Near the house and hiding the foundation, cinnamon roses grew in riotous profusion. They were never trimmed and were so dense and thicketlike that the catbird yearly made a home there.

From the entrance to the porch I could see, in the distance, the dark, rich green of a hemlock forest which met and intermingled with the lighter green of other wood, and through an opening, the blue waters of Lake Erie made pleasing contrast.

Outside the yard and across the drive to the right, stood a tall maple like a grim sentinel ever on duty, and at whose command a row of large sweet cherry trees waved their branches in a most threatening manner.

The war (civil) was well over but my earliest recollections were of the stories of incidents connected with it, and it



was small wonder that my childish imagination peopled the trees and birds and flowers as participants and survivors. For me the blue-jay wore a "Faded Coat of Blue;" the oriole played a fife and the flicker was a drummer boy.

From my fortress, the porch, I first heard the old war song: "No Flag But the Old Flag." It came in a clear sweet soprano, a voice of volume, which filled the house and carried well into the distance, yet losing none of its richness. In keeping with the words the voice swelled in pathetic appeal and undoubted triumphant victory. It was accompanied by the pure mellow tones of a Bradbury piano. The musician was my mother, a small slender woman but strong-willed, determined, somewhat arrogant. One who accomplished a purpose planned, and who sang and played with an ease and freedom which showed perfect command of both voice and instrument.



Mrs. Austin's mother at the piano "Singing the Old Songs." Pianos in ante-bellum days were not as common as they are now by any means.

"No Flag But The Old Flag," solo and chorus, music by Chas. G. Degenhard, and words by Jennie M. Parker, was "Dedicated by permission, to Maj. Millard Filmore, of 'The Union Continentals' and Corps under his command." There is a picture of the American Eagle and the Flag with Thirty-four stars on the cover page.

Another interesting old piece is a descriptive one called "The Celebrated Battle of Prague." Composed by Kotzwara.

The Battle of Prague between the Prussians and Austrians took place, I believe, about A. D., 1756, with Frederick the Great ruler of Prussia, and Marie Theresa ruler of Austria, and resulted in Prussian victory. The music, written to represent the conflict has printed calls of the various parts which are to be given by the player. It starts with a *Slow March*, followed by emphatic chords as the *word of command*. Next is the *1st signal cannon*, then the *bugle horn for cavalry* and *cannon in answer to the 1st*

*signal cannon*. *Trumpet call* followed by *cannon at intervals*. Next comes the *attack* in allegro time, the treble clef representing the *Prussians* and the bass clef the *Imperialists*. There are several bars of this interspersed with *cannon* and representations of *flying bullets*, after which come *trumpets* and *kettle-drums*. This is followed by an *attack with swords* during which is an imitation of *galloping horses* which sounds very real.

There are several bars of *Trumpet light dragoons advancing*, *heavy cannonade* and *cannons and drums in general*. *Running fire*—a mournful strain of *cries of the wounded*, then the *trumpet of victory*. *God Save the King* followed by *Turkish Quickstep*, and ending with *Go to Bed Tom*.

Another piece of music which has the appearance of being very old is: *The Ship on Fire*. A descriptive Scena. Words by Chas. Mackay, music by Henry Russell. The cover page shows a very early style of sail boat on fire.

A musical drama of the Settlement of Jamestown selected from the most celebrated opera of Rossini, Bellini, Auber and other celebrated masters. The personages: Narcissa, Lelia, Capt. Smith and Goswold. The drama begins with "On the Ocean in a Storm," solo sung by Narcissa with chorus by sailors and emigrants. Descriptive call. "They hope the storm is o'er, but hope in vain."

Following are parts of some of the solos and choruses:

#### "Lament. For Home—1st verse.

Where are now the hopes we cherished,  
Where the joys that once were ours?  
Gone forever! all have perished,  
Till despair now o'er us lowers.  
Ne'er again shall friends or country  
Greet our eyes or cheer our hearts.

We near the land. Cheer up there's land ahead." A song of praise. They approach shore and land.

Enjoy the forests but fear danger;

"When daylight's going, and night winds flowing,  
When stars are twinkling, the heavens brightening,  
Oh, then the savage lurks in the wildwood.  
Yes, the savage lurks to seize upon his prey."

"The Cough and Crow to roost are gone;  
The Owl sits on the tree;  
The hushed wind wails with feeble moan  
Like infant Charity."

Part 2nd—Captain Smith accompanied by some of the colonists leaves home to seek food from the Indians. Song, welcoming his return. The drama ends with:

"Sweet is the joy of the home and the fireside  
Dangers are past, the savage appeased."

An Irish song, "Pat Maloy," with words by Dion Bourcicoult is of interest, and was sung with immense success by Mr. Dan Bryant in his inimitable character of "The Irish Emigrant" at Wallack's Theatre, New York.

Later old songs are: "Tramp! Tramp! Tramp!" (The Prisoner's Hope.) Words and music by Geo. F. Root. "Bell Mahone," "Take Me Home," "Little Barefoot," "Silver Threads Among the Gold," "You Are Always Young To Me," and many others published about the same time that are well known.

(Concluded on page 69.)

## Millions in the Flower Industry.

E. J. FARRINGTON in *Ohio Farmer*.

GROWING CUT FLOWERS for market has come to be a business of enormous proportions. Roses and Carnations are the most important commercial flowers, although immense numbers of Violets and Lilies of the Valley are also sold. The annual expenditure for Roses in the whole country runs to \$6,000,000, which pays for 100,000,000 Roses. Quite as many Carnations as Roses are grown but they are not quite so expensive, running about \$4,000,000 annually.

Of course, the larger proportion of these flowers is grown under glass. There are over 6,000 glassed-in flower farms in the United States, and the glass surface amounts to 68,030,666 square feet. More than half this glass is in the North Atlantic States, New York leading and Pennsylvania coming next. The largest Rose-houses in the world are in Southern New Hampshire, whose market is chiefly Boston, where retailers come to buy the gorgeous blooms. Chicago is also a big distributing center. And New Orleans is coming to be, for growing flowers for cutting in the South and shipping them North is being developed. The flowers are grown out doors in Louisiana and other southern States, and it is no more difficult to ship them North in refrigerator cars than it is to ship vegetables.

Many big green-houses are given over to special flowers. Roses are the prime best sellers among cut flowers, and no flower seems likely to displace them in popular esteem. Sometimes a new variety sweeps the country, as did the pink *Killarney*. Different varieties lead in favor in different cities. The *American Beauty* heads the list in New York, but the *Killarney* is preferred in Boston. It is the same with Carnations. The kinds which outsell all others in Philadelphia may hardly be known in Buffalo.

New York City is the center of the Violet-growing industry; more Violets are raised within a radius wide enough to include Poughkeepsie than anywhere else in the world. The Rhinebeck section on the Hudson River is famous the country over, and there are some large Violet growing establishments on Long Island. South of Baltimore Violets are grown in coldframes and covered with mats in winter, but heated houses are needed in the North.

Violet growing is hard work, but a number of women have succeeded in the business. One such Violet grower in Michigan, who now has a prosperous little plant, was for many years a school teacher.

Of course, there is a great demand for Lilies at Easter time. When the demand first began the beautiful *Madonna* or *Annunciation* Lily (*Lilium Candidum*) was grown and this is, of course, the true Easter Lily. However, florists soon found that it is hard to get this variety into flower at Easter time, so they adopted the *Lilium Harrisii*, or *Bermuda* Lily. For years enormous quantities were imported from Bermuda. But after a time the Bermuda stock of bulbs began to deteriorate, then the florists turned to Japan, and now a very large proportion of the bulbs forced for Easter are of Japanese origin. Varieties of *Longiflorum* are used, and the average buyer sees no difference between them and the old-time *Bermuda* Lily.

Many Calla Lilies and Lilies of the Valley are also grown under glass and are popular as cut flowers, and produced in great numbers, the latter being favored for brides' bouquets. Lily of the Valley pips may be kept in cold storage for months, until the flower grower gets ready to force them into bloom, which fact makes these lilies popular with growers as well as with buyers.

In summer thousands of outdoor acres are

given over to Gladioli, Dahlias, Asters and other garden flowers. Gladioli have achieved remarkable popularity in the past few years, because of their beauty and the fact that they can be kept a week or ten days when cut. A 100-acre farm in Berlin, N. Y., is given over wholly to these wonderful flowers.

There are over 6,000 farms or establishments in this country where flowers are grown commercially. All over the Eastern States there are Pansy farms, some large and some small. Most of the Pansy plants sold in New York city come from Long Island. Pansy plants are sold practically by the quart, little flat baskets holding six quarts each being used. One firm supplies Long Island growers with nearly 100,000 of these baskets. The number of plants actually sold by these growers will come close to 9,000,000 each season. A number of women are succeeding with commercial Pansy growing. The seed is expensive, the best about \$1 per 100 or one cent each.

Tuberose are not so high in favor as they used to be. The trade is supplied almost entirely from Magnolia, a little town in North Carolina. Great numbers of Cannas are also grown there, for the climate is so mild that the roots will winter safely when only piled in ricks and covered with earth. Some Carolina farmers grow Cannas as a side line, some having as many as fifty acres given over entirely to them.

As to the commoner flowers, in Onondaga County, New York, H. B. Williams has about 35 acres in Asters, a waving sea of crimson, blue, pink, white and lavender bloom. Mr. Williams was a dry goods salesman before a gas explosion blew the building of the firm he represented into flinders and incidentally blew him into the flower business. He had grown Asters as an amateur before, but now he made a study of Aster growing along scientific lines and after a few years found himself producing such fine flowers that he could sell all the seed he could raise. Now all his output takes the form of seeds, amounting to 1,500 lbs., all coming from flowers picked within 15 days. As many as a hundred women are sometimes engaged in the picking, and the flower heads are taken to a warehouse, where they are dried in a kiln. Then the seeds are threshed out in a machine invented by Mr. Williams.

Eva Morris is a Cuyahoga county, Ohio, girl who has built up a nice business in Sweet Peas. Every day every single blossom is removed from the vines. In California there is a farm on which 600 acres are developed to Sweet Peas.

Flower Markets.—Most of the Northern cities have flower exchanges, the largest being in Boston; it is probably the largest indoor flower market in the world. It does an annual business of almost \$1,000,000, and its whole purpose is to sell to the retail trade flowers brought in by growers. The enterprise is co-operative. A large store is divided off into streets and alleys, the latter lined with stalls, which are auctioned off once a year, the highest bidder having his choice. At the end of the season the profits are divided up. The association has a secretary who is in general charge of the business. There is a big refrigerator for holding flowers kept over. In the early morning, when most of the business is done, the scene in the exchange is an animated one, with buyers coming from all parts of the city and suburban towns to obtain their stock for the day. One man does a business of nearly \$400 a day simply in cut flowers.

Mohamet once said: "If I had but two loaves of bread I would sell one and buy Hyacinths to feed my soul." The sentiment seems to actuate the people of the cities,

hence flower farming has been built up in the United States into a business the total products of which are valued at no less than \$30,000,000 a year.

### Flowers for Tubercular Patients.

The fraternal organization known as "The Modern Woodmen" have an institution at Colorado Springs, Colo., known as "The Woodmen's Sanatorium." An article in *The Modern Woodman*, the organ of "The Modern Woodmen of America," appears in the January issue entitled "The Therapeutic Value of Flowers." This article was written by one of the physicians connected with the sanatorium, which, by the way, is exclusively for the members of the order who are suffering from tuberculosis in its early stages. We are pleased to give a part of the article as follows:

Tourists, in passing through the sanatorium grounds, and visitors who come here, marvel at the wonderful beauty of the grounds, which has been created by the addition of flowers, shrubs and trees. The average person thinks that these are simply to add to the beauty, and to be admired by those who may travel this way. We have had occasion though, to look deeper than this for the incentive to develop this work, and that is, the therapeutic value that flowers have in cases of sickness.

It is pleasant to study and to dream of the language of flowers. The patient, for example, leaves his home, thinking he is coming out here, a thousand miles in the wilderness. He comes here to the sanatorium, where all are strangers to him. The first lesson he learns is from the bouquet of flowers he finds on the stand in front of the bed, which tells him there is someone here who cares for him. It brings to the patient a message of friendship, along with fraternity. Many of the patients have told us that the bouquet of flowers, which greeted them on admission here, was the best antidote that could possibly be given to cure nostalgia, or homesickness.

They learn to admire the beauty and fragrance of flowers, which satisfy the nerves and lull them into a restful sleep. The greatest cure of all cures for tuberculosis, that has ever been found, is rest, absolute rest, a complete rest; and by this we mean mental as well as physical rest. By beautifying the sanatorium as we have, we cultivate a desire for flowers, for beauty and harmony.

Flowers bring messages from the giver to the receiver, and bring better and purer thoughts to the recipient. In the mystery that surrounds the spirit of the seed, the development of the plant, and the bursting of the bud into the beauty of the flower, messages are carried, especially to the sick, that are elevating, and they create a desire to live worthy lives; they give the patient an ambition not only to live, but to live surrounded by beauty, cleanliness and fragrance.

The sanatorium has three greenhouses for the propagation and growth of flowers. The dining-rooms are supplied with flowers at all times; the bed patients always have a bouquet of fresh flowers in their rooms, and each patient is remembered with a bouquet on his birthday. These all go to add cheerfulness to the unfortunate patients who come to this institution to fight for their lives.

There is room for additional suggestions from flower growers for the raising of funds for Red Cross work. If you have ideas please let us have them.

## The Flower Grower

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square deal to all.*

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"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### Advertising and Trade Usages.

Now, I will try to explain my point in relation to a trade discount. This is first a matter of courtesy. John Doe advertises *Americas* at \$15.00; I have none. My friend and customer sees the ad. and hands me an order. I write J. D. and explain that I want 1000 *America* and must sell at his advertised price. Will he kindly allow me a discount to cover expenses? He allows me, say 20%, and I am likely to send him other orders. Your theory is right so far as it relates to *one* order, an equal price to all, but the trade discount is based on the probabilities of the whole year. A retail customer buys usually but one lot in a season. A dealer may order in the aggregate 10,000 or 100,000 and consequently be fairly entitled to a quantity discount on any part of that quantity. This is trade custom in all lines of business and it seems to be a necessity and in most cases it is logical and right. Of course there are exceptions, the "penny-ante" wholesaler and the 50,000 retail customer are the two extremes.

Now, in regard to the use of the phrase "for the trade only" in THE FLOWER GROWER. I don't say it is unfair but it is foolish advertising. The advertiser ignores three-quarters of the readers, pays for space to tell them they are shut out! An advertisement should appeal to all classes. Consumers are pleased to see a quantity price which looks like a wholesale price, while the dealers and growers know, if they are business wise, that they can get a 20 or 25% off the published rate.

I think we have been advertising too small—"1 bulb 5c."—don't get anywhere! Is it unbusiness-like to advertise 1000 at a fair rate? Or on the other hand, is it business to advertise 100 retail as low as the average 1000 wholesale list? That is what some are doing.

But that is none of your affair, you are justified in letting the man who pays for the space use it his own way so long as it is honest, and the fittest will survive. I suppose the fact is that some growers have no business training and when they try to sell their own product they sometimes make a mess of it. Some growers are advising against

offering for sale *any small stock*. The theory is, sell only large bulbs, sell more of them at a better price. I don't see it that way. The florist sells seeds, plants *and* flowers. Why should I not sell any quantity and any size that a customer wants? My grocer might say—"I will refuse to sell flour and so increase my sales of bread!"

Millions of families ought to be buying our bulbs; let them buy in any quantity and any size they fancy, and so develop in America a love for flowers and flower gardens which at present is sadly neglected. May THE FLOWER GROWER live long and prosper.

S. E. SPENCER.

Note by the Editor—

Having had some correspondence with Mr. Spencer on the above subject, he wrote us a letter which contained the ideas set forth above and it seems that it will be a benefit to the trade to make plain just what is fair and right in connection with this matter.

We agree with Mr. Spencer that many growers have been advertising too small. There is no good in advertising a low priced variety at 5c. per bulb. What satisfaction will a purchaser get out of one bulb of any particular variety? Better not sell anything less than half a dozen except of the rare and expensive varieties.

The man who buys in wholesale quantities is entitled to wholesale prices, but not necessarily to a trade discount as Mr. Spencer explains. This whole subject is a matter which is of the utmost importance to the trade as well as to the consumer and we hope others will have something to say on this subject.

The Red Cross has benefited largely by the efforts of flower growers, and will, we trust, benefit still more largely from the suggestions which are contained in recent issues of THE FLOWER GROWER. We learn that A. E. Kunderd, the well known Gladiolus hybridizer of Goshen, Ind., donated a quantity of Gladiolus corms to the Red Cross organization of his home town from the sale of which over \$100 was realized. Incidentally we might also state that last year Mr. Kunderd presented the school children of Goshen (some 1500 of them) with four bulbs each of his choice Gladioli. This gave great pleasure and satisfaction to the children and resulted in quite a boom for the Gladiolus in Goshen.

Details of methods by which the Red Cross can be benefited by the sale of cut flowers may be worked out along the lines already suggested in THE FLOWER GROWER or new ideas can be developed. Those who have worked out other plans than already mentioned will confer a favor by writing us about it.

Mr. J. C. Vaughan, of Vaughan's Seed Store, Chicago, on reading the article by Dr. Castle in the May issue suggests that instead of slat bottom crates, that crates with galvanized wire screen should be used for storage of Gladiolus corms from the field to prevent the bulblets from falling through and mixing with other varieties that might be stored in crates below. The editor is using crates about 18 inches by 3 feet and 4 inches deep with  $\frac{1}{8}$  in. mesh galvanized wire screen for bottoms. They seem to be giving satisfaction for the purpose.

It has practically been decided that the next annual flower show of the American Gladiolus Society will be held in Buffalo. This location is so central and well located that we look for a big show. Buffalo is easily reached by Eastern growers and as well by the Ohio growers, and those in the Middle West can make Buffalo without serious delay or inconvenience. Write Secretary Beal for a copy of the prize schedule.



## WAYSIDE RAMBLINGS

### GIVING EXTRA CORMS WITH ORDERS.

Following the formula of the political platform writer, "We view with alarm" the sentiments of a paragraph in the April FLOWER GROWER in regard to the extra corms for trial sometimes contributed by growers when filling their orders. "Somewhat of a nuisance" and "not much of a kindness!" No, no; far be it from such! To the amateur Gladiolus grower whose profit consists only in the pleasure derived therefrom, one of the greatest sources of satisfaction comes from the almost infinite variety of forms and color combinations in which the modern Gladiolus is produced. As each blooming season approaches, it finds the enthusiast bending over his "new ones" awaiting their advent with impatience, knowing that his favorite flower will come in some new form and dress to delight his soul. Large indeed would his garden and his purse need to be should he purchase and grow every variety offered but, if the grower, in his confidence that he has something that will please his customer, shall put in with his shipment a sample corm or two, the amateur welcomes the same and crowded indeed will his garden be if he does not find a little spot in which to give these samples a trial. And perchance this contributed corm shall produce a flower whose charm will so appeal to his aesthetic nature that next season he adds many of its kind to his collection and is thankful that the grower has brought it to his attention. If it does not please, he casts it aside having lost nothing by the trial as he feels it costs him nothing.

Then, too, if a single corm be a nuisance to grow, what shall be said of the collections offered by some of our greatest growers. One, the writer has in mind, offers his wonderful productions in collections of one each of from twenty to forty varieties. Twenty to forty nuisances? Indeed, no! Twenty to forty joys, a joy for each new variety should the amateur be fortunate enough to have them bloom in his garden. C. S.

*Note by the Editor—*

"C. S." has not adhered very closely to his text in commenting on the article in question as may be ascertained by referring to the short editorial in the April issue. However, we are pleased to give space to his comments hoping to hear from others who have opinions on this subject.

### MANY DIVISIONS OF GLADIOLUS CORMS.

Referring to article entitled "Seven Gladiolus Corms from One," on page 33 of your March edition we wish to make the following statement accompanied by photograph, of the performance of a corm which we have designated as seedling number 286.

This seedling corm was two inches in size when it was planted in the autumn of 1916 with 200 other white varieties of corms. It went through

the most severe frosts known in this country without damage while over half of the other varieties were entirely ruined.

This seedling, No. 286, produced eight



flowering spikes. The main one was 6 ft. high and the other seven nearly 4 feet each, the individual flowers being over six inches in diameter, of a glistening snow white color without the least trace of marking, the best color secured from the whole 200 white seedlings; in fact the best white we have yet produced. From this bulb we harvested eight large bulbs which together weigh 17 ounces, one 1 inch bulb and 83 cormlets.

RICHARD DIENER.

### VARIOUS COMMENTS AND SUGGESTIONS ON DIGGING, LABELING, ETC.

I want to congratulate you on the appearance of THE FLOWER GROWER which seems to get better each month. You made a good move when you enlarged the publication, the only trouble being that the new form will not stack up very well with the bound volumes of the old size.

That little item about prognosticating an early spring seems to hardly apply in this middle section of Indiana. The ground worked beautifully by March 14th, and on the 16th I planted some 6,000 cormels of named varieties of Gladioli.

I have used more care than usual this year, spacing the cormels about  $\frac{3}{4}$ -inch apart. Of course this would be too big a job for a large grower, but I have not been altogether pleased with the development of many of the cormels, when scattered haphazard in the trenches. Where they happened to drop very close together, some would make quite sizable corms, while others would hardly increase in size.

My soil is so heavy that I have found

a shallow layer of sand in the bottoms of the trenches to be a great labor saver when it comes to harvesting the crop. One can run a spade right along in the sand layer, turn the spadeful of soil over, and the little corms are exposed to view and easy to pick out.

My method is to get rid of all the soil I can, then place the corms in a riddle and wash thoroughly with water from the hose, then spread out thinly to dry. They are exposed to the out-of-doors air for a day, then spread on papers in the attic, where they lie for two to four weeks before being cleaned up.

Brought down, a batch at a time, the cleaning off of roots, separation by varieties and sizes and labeling makes pleasant occupation for the early fall evenings.

Last fall I made one mix-up. Got my *Canary Birds* in with some *Mrs. Francis Kings*, which I very much regretted. There were a good many more of the latter variety than I cared to grow, but I wanted to save the fifty-five *Canary Birds*, so there is nothing to do but plant the entire lot and label the plants in the rows when they bloom. This is the first time I have been troubled with mixing, and it will make me doubly careful this year.

Continual care is required to avoid mixing, and once it is done the trouble is generally beyond remedy. If the corms happen to be of decided colors, like *Mrs. Frank Pendleton* and *Brenchlyensis*, for instance, they can be easily distinguished.

I carry a pencil and paper in my pocket and make notations of the number of each variety as planted, with the row number. When a row is finished, a permanent record is made in a loose leaf book, kept in a special drawer of my desk. Having only a few corms of quite a number of varieties, rows will sometimes have as many as twenty kinds in them. Spaces are left between the varieties so there will be no danger of mixing in digging the corms, and stakes driven in the spaces.

All this will not interest the large grower, but may help the little fellow some. Our neighborhood is blessed with many children. Usually they have the run of the place, but when the time comes to harvest the Gladioli, the kids have to "keep off the grass." There is too much grief connected with shifting a label into the wrong batch.

HARMON W. MARSH.

Mr. Marshall, author of the article, "A Rose Garden", in our April issue writes us as a matter of information that he has recently discovered two immense Roses climbing over a house top and that they were a mass of pink blossoms in March. These were planted when the house was built in 1838. This, we imagine, is quite an argument in favor of hardy climbing Roses. We wonder if it could be discovered what variety of Roses was able to make the long life indicated.

## E. Y. Teas, Veteran Nurseryman and Florist.

MR. TEAS HAS BEEN a frequent contributor to the columns of THE MODERN GLADIOLUS GROW-

modestly signed with the initial "E" have been equally valuable.

Mr. Teas is a pioneer nurseryman and florist and was one of the first to embark in the nursery business in the state of Indiana. He was one of the charter members of the Indiana State Horticultural Society and has been very active in various matters connected with this body.

Among Mr. Teas' activities in the nursery business was the originating and introducing of the "President Wilder" currant, one of the very best of the red currants. He also bought the entire stock of "Lucretia Dewberry" and distributed it. He was the first nurseryman to offer the Japanese Tree Lilac for sale.

During the past few years Mr. Teas has made a specialty of the American Ever-blooming Hydrangea, and has been interested especially in the growing and propagating of Peonies.

We again repeat what we suggested once before, that as an example of helpfulness, Mr. Teas

by his writing at an age approaching the century mark, can hardly find a peer.



ER and THE FLOWER GROWER. His articles on Peony growing have been especially helpful, and shorter articles

### Clinging Vines.

Nurserymen are often asked to recommend the best clinging vines for walls. In reality there is not very much choice. The one vine that can always be depended on is the *Ampelopsis Veitchii*, popularly known as the Boston Ivy. The *Ampelopsis Virginica*, or Virginia Creeper does not adhere so closely to the wall and unless the stone work is rough or it can drape over a cornice, it is liable to become detached and is not nearly so good.

The English Ivy is the best evergreen vine and is to be seen covering walls of a large area in the latitude of Philadelphia and south, but it is rather difficult to get it to climb on a wall with a southern exposure. The walls get too hot and the small tendrils will not adhere to it. In starting the English Ivy, and in fact any of the clinging vines, it is better to either cut the tops back and let them make a fresh start right from the ground up or else peg the tops along the base of the wall so that the new shoots can adhere to the wall surface from the ground up, as however carefully they are nailed or artificially fastened to the walls, there is always some movement and it is not an easy matter to get the vines started, and even when they do start there is always a loose portion of the old stem not properly attached.

*Euonymus radicans* is sometimes suggested as a good clinging vine. It is to be recommended for low walls, bases and copings, but is hardly to be recommended where

height is expected, as it is very unusual to see it get more than eight or ten feet high, and being somewhat subject to *Euonymus* scale, it is objectionable on that account, as when once an old plant is infested it is rather difficult to treat.

A somewhat rare clinging vine is the *Hydrangea scandens* or Climbing Hydrangea. This, however, is very uncertain in its growth, but when it does get a position that suits it, it is remarkably free, making as much as eight and ten feet in a year. There are several plants in the vicinity of Philadelphia, covering the sides of two and three story houses, and it is remarkably pretty, especially in the spring when the tender green of the foliage is unusually attractive.

It does not flower while it is growing freely, but has somewhat the habit of the English Ivy when the growth becomes bunchy and it cannot climb any more, it will flower very freely. The flowers are white and flat, but it is the color of the foliage and pleasing habit that is its greatest attraction.

It can be grown either from layers or from cuttings made from half ripened wood put in gentle bottom heat during August.—*National Nurseryman.*

Scarcity of help has made prompt planting difficult for many growers this year, but for the most part fair progress has been made. It is hoped that the growing season will assist making up for lost time.

### The Glad Philosopher's Musings.

Don't you feel sorry for the fellow who always carries a grouch around with him—the person who sees as if through a pair of yellow spectacles, which reveal the shadowy side of everything bright, so that he is always expecting trouble or anticipating calamity?

One bright morning recently as I was walking down street with a friend, we met an old acquaintance whom I will designate as "Billious Bill," because no other name would be quite so appropriate.

"Good morning, Bill," I saluted; "Isn't it a fine morning?"

"O, yes," grunted out Bill, "but it'll probably rain before night."

As he passed on I said jokingly to my friend, "Paradoxically speaking, Billious Bill is always feeling at his best when he's feeling at his worst."

"Yes," replied my friend, "if Bill could be happy for fifteen minutes he'd be the unhappiest man in the world."

Let us not complain that thorns grow on the same stems with Roses, but rather let us be thankful that Roses grow on the same stem with thorns.

The garden and the grouch are incompatible. You may have the grouch, brother;—the garden for yours truly.

I want to love my neighbor as myself, but how can I when he allows the dandelions and plantains in his yard to go to seed and blow over and spoil my weedless lawn?

After all, it's mostly a question of familiarity that causes the distinction between weeds and garden flowers. Likewise, it's the forwardness of some people that stands in the way of their friendships.

June is the favorite month for the sentimentalist. It is June that gives us the Rose and the Peony, our two most beautiful flowers; and it is June that gives us the sweet girl graduate and the bride.

The insect pests now gorge and stuff, devouring with rapacity; it seems they cannot get enough, they have such great capacity. I fain would know the reason why—can someone answer me this question—Why don't the ravenous gluttons die of gout or acute indigestion? Its munch and chew, noon, night and morn; they aim complete annihilation. Pray, Mr. Hoover, why not warn them to observe food conservation?

Show me the man who loves flowers and I'll show you a man with much good in his nature. Show me the man who does not love flowers—but no, you needn't show him to me. I do not care to see him. I'd be afraid of him.

THE GLAD PHILOSOPHER.



[This department of THE FLOWER GROWER is intended to be one of its most helpful and valuable features. All questions asked in good faith and which are of general interest will have careful attention. The full name and address of the writer must be given, but not for publication.]—EDITOR.

### Peeling Bulblets.

TO THE EDITOR:—

Can Gladiolus cormels be peeled any time during the winter and the shelled cormels kept without danger of damage until spring planting time? I have quite a number of cormels of many choice varieties that I wish to increase as rapidly as possible and as I have secured much better results by shelling the hard cormels would like to do this during the winter if it can be handled in this way with safety, and it will thus save much valuable time during the planting season?

H. L. H.

*Answer:*—While we have had no personal experience with peeling bulblets before planting, it is our impression that this work should not be done much in advance of planting. If cormels were peeled early in the winter or several months before planting it is quite probable that they might dry out to an extent which would injure or destroy their vitality. After peeling they would necessarily need to be stored as corms are stored, spread out and not in too large a bulk. Stored in this way they might dry out excessively owing to the small size. Can anyone who has had experience along this line give us further information on the subject?

### Sowing Small Corms.

TO THE EDITOR:—

I would like to ask how large a bulb can be sowed the same as we sow the hard bulblets and have them come O.K.? It is surely a big task to set the little fellows and if I can avoid it, it would make a big saving.

F. M. P.

*Answer:*—We understand that some of the large growers drill or sow everything smaller than one inch. We would recommend that if possible all the corms larger than one-half inch should be set separately by hand in an upright position. Of course a larger corm will put up a sprout even if it is bottom up but this means a loss of time and weakens vitality to some extent, and corms in this position will not make as large a corm as one properly set. Of course it is understood that the small corms are not planted as deep as the large ones and when only about three inches or so under ground, the sprouts come up quickly whether the corm is upright or not. Large corms bottomside up and six inches under ground would take a much longer time to reach the surface with a sprout than if planted upright and as before stated this means a loss of time and a smaller increase.

### Questions About Possible Improvement of the Gladiolus.

TO THE EDITOR:—

As I am interested in growing the Gladiolus and have watched the great improvement which has been made during the past few years, I am anxious to have your opinion as to what you believe possible in the way of improvement in the future. Do you think it safe to assume that there will be as much progress made in the next fifteen years as there has been in the past fifteen years? Surely the Gladiolus will distance all rival flowers if improvement continues as it has.

HOPE.

*Answer:*—Any man who dares to prognosticate the future of the Gladiolus will be venturesome indeed, but it hardly seems possible that as great improvement will be made during the next few years as has been made during the past few years. Such improvement progresses in cycles and we are just now passing through a cycle of great progress and a period of comparatively small gain is certainly due soon. We are quite aware that some growers may disagree with us on this point, and we may be wrong, but the wonderful varieties now available make further improvement extremely difficult and we venture at this time to go on record that the Gladiolus is not likely to make as rapid progress during the next decade as it has during the same length of time just past.

### Tuberose Bulbs for Second Year Blooming.

TO THE EDITOR:—

I have a number of Tuberose bulbs which have bloomed last year. Please state if bulbs once bloomed are of any value for blooming again this year, having reference to *Double Pearl*. If not state reason. What may I expect of the Mexican Tuberose bulb that has bloomed also?

MRS. E. BRESWINE.

*Answer:*—Bulbs rarely, if ever, bloom more than once. In the case of the Hyacinth and others which appear to do so, it is not the original bulb that blooms a second time, but a new bulb produced from the old one. In the case of the Tuberose, the old bulb produces a new bulb of this kind, as well as a number of smaller ones springing from the base. All these bulbs may be separated and grown on to flowering size. The larger bulb produced may bloom the next year but commonly it requires at least two years for it to reach blooming size.

WILLARD N. CLUTE.

### Notes from a New York Garden.

In many sections of the state the season for planting tender vegetables is so late that we do not realize the profit we should from our gardens. Last year I observed a plan by which a person managed to have cucumbers ready for the table long before her neighbors could boast of more than a few blossoms. Early in May she planted her cucumber seed in quart berry boxes lined with heavy paper. The boxes were placed in a south window where they had plenty of light. By the time the ground was fit in the garden the cucumber vines were starting to run. They were transplanted on a dark day and only a very small percentage of them perished.

The Virginia creeper or five-leaf ivy makes one of the most satisfactory shades for a porch or exposed surface. It is very easy to grow; but takes some time to start. I have discovered a way of transplanting it in full grown form, thus having it furnish shade the same year it is planted. In a careful manner dig the vine up by the roots and carry it to the place where you wish to have it grow. Take a potato and slice a gash into it. Then place the root of the ivy right in the opened potato and plant. The potato will furnish enough moisture and food to the vine to enable it to put forth leaves and blossoms. The ivy should be planted just as the buds begin to open. A series of three or five wires strung across the porch furnish enough support for the vine. The leaves will soon open and make a tangled mass of foliage.—MRS. W. J. HUGHES in *Rural Life*.

### Every Gladiolus Lover Should Possess a Collection of Fine Peonies.

This gorgeous flower whose beauty and elegance equals the Rose, takes such little attention after planting that no lover of flowers and especially Gladiolus growers should be without some of the most attractive sorts, such as *La Cygne*, *Mad. Geissler*, *Martha Bullock*, *Eugenie Verdier*, *Elwood Pleas*, *Baroness Schroder*, *Jubilee*, etc.

Deep cultivation before planting, well enriched ground, together with a sunny position are the points necessary to secure prize winning blooms.

At last year's Peony show, notwithstanding the great distance from Philadelphia, Van Wert, Ohio, growers captured a great many of the prizes, and they hope to make even a better record at this year's Peony show which is to be held in Cleveland, Ohio.

The "Gladiolus enthusiast" can plant Peonies four to five feet apart and fill the open spaces with Gladioli, thus securing a succession of bloom throughout the season.

If you have never grown Peonies order a dozen choice varieties from a good grower now for fall shipment.

CHAS. F. WASSENBERG.

### The Joys of an Old Time Editor.

[Continued from first page.]

that it is so. But ye old editor sighs as she looks over the bound volumes of a few years ago. It was so nice to have 1000 friends a year write to you!

We have never seen a more rapid growth in our Gladiolus garden than during the last two weeks of May 1918.

## The Gladiolus As a Summer Cut Flower. Its Culture in the South.

BY CHAS. L. BAUM, before Tennessee State Florists' Association, Nashville.

Mr. President and Fellow Members:—

I will not mention at this time the discovery, history or the origin of the Gladiolus of to-day, but my theme is the Gladiolus as a summer cut flower and its culture in the South.

The popularity of the Gladiolus has grown to such an extent that no florist is up-to-date who does not grow or handle them as a summer florist flower. It is worthy of world-wide popularity as there is no flower that is more satisfactory. There are no plants that have more gorgeous coloring than these, and words cannot paint their beauty; there are none that give more satisfaction to the customer, and nothing offers so much for the money. There is no summer flower that has the keeping qualities of the Gladiolus, and if cut with only one or two blooms just opening and placed in water the whole stem will bloom and last quite a week or longer.

Some of the newer varieties have the most gorgeous coloring that you can imagine, every color, shade and tint of the rainbow is displayed and they are actually a rival of the orchid.

This beautiful flower can be used in a number of ways. Nothing excels it for the home decorations. It also makes a beautiful display in vases. Nothing makes more handsome funeral sprays than some of the lighter colored varieties and stemmed individual blooms are as pretty in a floral design as a lily. It also can be used in hand bouquets and corsages and the effect is very beautiful. *Lily Lehmann* is as pretty in a corsage bouquet as a white orchid, and for spray work it is unexcelled.

In my opinion, the variety *Lily Lehmann* is the best all around white Gladiolus to date; no white variety equals it—a lily in both name and form, a pure glittering white with just a tinting of pink on tips of the petals, matchless in form and coloring. I will quote here what an expert on Gladiolus says of it. He says:

"*Lily Lehmann* is the most beautiful white grown; very slightly tinted with pink at first, then turns snowy white, with white stamens, and in form and color as beautiful as a lily."

This variety can now be purchased very reasonable and is an early free bloomer and a fast multiplier, and is fast becoming universally grown. It is almost in a class by itself. It differs somewhat from other varieties as the large wide open flowers are almost opposite on the stem and are spaced farther apart than most varieties. My next choice in white is *Europa*, which is a pure paper white with a slight lavender touch down deep in the flower. *Glory of Holland* is a good commercial white. *Augusta* is an old variety, easy grower, but not white enough and is too small. *Chicago White* is also too small. *Meadowvale* is fine but a little high-priced. *Peace* is a strong grower, but should not be classed as a white as it has too much color.

One of the most popular Gladioli, and the most universally grown is that beautiful light pink variety, *America*. However, I fear it has seen its best days, and I believe will soon have to take a back seat for *Panama*, which has a better color and is a larger flower. It has not quite as much substance and more care must be exercised in handling it. The color is a deeper shade of bright pink with no lavender shading. *Taconic* and *Pink Perfection* are fine, darker than the above; *Pink Perfection* is the best. *Pink*

*Beauty* is the earliest of all the pinks, but is not wanted as soon as other pink varieties come in. *Halley* is the finest dark salmon pink, beautiful large open flower and is one of the best.

In yellow *Niagara* is the best one that can be purchased at a reasonable price. It is a beautiful buff yellow, fine for sprays and vases, and in my opinion will be the best yellow for sometime to come. *Schwaben*, light yellow, is a beauty, but as yet it is too expensive for general use. *Klondyke* is a fine commercial variety and has many pretty flowers open on the stem at one time, giving a beautiful effect but the flowers are a trifle small.

In reds, *Mrs. Francis King* is most popular, but it is not a true red, having more of a salmon red or brick color. *Electra* is the finest red I have ever seen, but it is yet a little expensive. *Velvet King* is a good dark red. *Crackerjack* is also a good one, but *Intensity* is better and very early. While we have a large number of red varieties I believe these are the best that can be procured at a reasonable price.

There is but little demand for blue shades and there are but two varieties that are of any value for cut flowers: *Bluejay* and *Baron J. Hulot*. *Bluejay* is the best of the two, but *Hulot* is the cheapest. There are a number of other blues, slate and chocolate colors but of no value commercially.

While we have hundreds of varieties of Gladioli, I believe I have mentioned the most popular cut flower varieties to date. Most of these varieties can be purchased at such a reasonable price that but very few growers are growing the cheap mixtures any more for cut flowers.

Now, just a word for some of the newer varieties (I say some of the newer varieties, not all, for they are too numerous to mention; there are thousands of them and some at a very high price—for instance, \$1,000 per bulb, as quoted in a Gladiolus catalogue just received a few days ago—I didn't buy any):

Last year we grew 150 varieties, all named varieties or seedlings under number from different Gladiolus specialists, and there are some wonderful flowers among them. We had a Gladiolus show at our store and exhibited 124 varieties at one time, and it was quite a pretty sight. We have added a few more new varieties to our collection and expect to have another display this July.

Now, as to the cultivation of Gladiolus bulbs here in our Southern country. I do not believe there is a place anywhere that is better adapted to their culture than here. We can begin planting late in February or early in March and have a long season in which to grow the bulb, and from a small bulblet or cormlet grow a flowering bulb in one season, and if these bulbs are just left in the ground, not dug, the next season they will give you 60% of select and 40% of No. 1 blooming bulbs, and a sounder or more healthy bulb you cannot find anywhere. I am speaking from experience for last April a year ago I planted three bushels of *America* cormlets and left them out over winter, and this last fall they were dug and a finer lot of bulbs were never harvested. They were all blooming bulbs and 1½ acres of cormlets planted last October in the field. The former 1½ acres we will harvest this coming October, and the other 1½ acres will be dug a year from the coming October. I have seven bushels of hard cormlets to plant this spring which will be planted in the

same field, and as last fall was the first time I planted hard bulblets in the fall it will determine which is the best—fall or spring planting.

I have been growing Gladiolus bulbs for the last four years and have used both Northern and European stock. I find the Northern stock forces better than the stock from Holland, but for outside there is no difference except the Northern stock will bloom a little quicker when planted at the same time. But if we can get the Holland stock in the fall I can see no difference after we dry and cure the bulbs. However, I always buy home-grown bulbs if I can get the variety I want.

As I said before, I don't believe there are any better Gladiolus bulbs grown anywhere than we can grow in the South, and while we have some advantages over the Northern grower we have some disadvantages also. One disadvantage is this, we must plant the same variety in the same place here, or follow with some other crop, as the cormlets are hardy here, and if one variety is followed by another they will become mixed. Our advantage over the North is that we can produce a better bulb in less time, and I know we can grow a better bulb here than in Holland, and I believe by growing them on a large scale we can grow them just as cheaply as on the other side, as we have better weather conditions and do not have to dig the bulbs until they have reached their full blooming size.

We begin planting as early in the spring as the ground can be worked. We plant the cormlets first in flat bottom drills scattering very thick, about 150 to the running foot, covered about 2 inches; next we plant small bulblets anywhere from 1 to 3 inches apart, alternately in a double row, according to their size; and so on until the large blooming bulbs are planted. We find that the smaller bulbs bloom later than the large ones. We plant blooming stock as late as the last week in June for late flowers, but if the weather is dry we must water regularly in order to get good results, otherwise the bulbs will not all bloom even if the larger sizes are planted. I have not irrigated to any extent yet, but for cut flowers I believe it a good policy; however, for just the growing of bulbs I believe frequent cultivation will do just as well.

The question, "How deep to plant?" has been asked many times. I would say from 3 to 4 inches, according to size of cormlets, from No. 5 to No. 1, and just as soon as they come up cultivation should begin. The crop should be run through with cultivator or hoe every week or ten days and all the weeds should be kept down, which is sometimes quite a task during our rainy season. The bulbs should be hilled up, say 4 or 5 inches, when a foot or more high, so they will not have to be staked or tied up to keep from blowing over and making crooked stems; planting double rows, say four inches apart, also helps to keep the stems straight. The flower stalk should be cut so as to leave at least four leaves to mature the bulb if you intend to save the bulb.

I will endeavor to give you the special treatment for forcing and the ten best varieties: Take the bulbs you wish to plant indoors (but not the ones you wish to plant later on in the field) and place them in shallow crates or boxes, and put them in your boiler room or anywhere where they can be kept at a high and dry temperature for ten or fifteen days, say at 85 to 90 degrees, but

do not put them on or against a hot steam pipe for they will bake. After they become thoroughly dry you can cool them off for one or two days; plant them and you will find that these dry bulbs will give you many more blooms than bulbs not so treated.

I will now give you the names of the best varieties I have tried for indoor planting: *Pink Beauty*, the earliest; *Halley*, salmon pink, extra fine, early; *Lily Lehmann*, the best all around white; *Glory of Holland*, a fine white, better than *Augusta*; *Electra*, early and most beautiful light red; *Pink Perfection*, almost a true pink; Peace is no good inside and not much outside, a rank grower but not white; *War*, a fine red; *Velvet King*, a better red; *Europa*, a beauty and the whitest of them all, but no good inside and a weak grower outside—if it had the growth of *Schwaben* you would have a fortune; *Schwaben* is very good inside but much better outside—it is a most beautiful light yellow with blotches; *Niagara*, fine, does very well inside and the best one of its color (not excepting *Schwaben*), a deep creamy buff, sometimes tinted pink; *Klondyke*, the best yellow for inside, very free, long spike and many flowers open at one time, but a little under size; *Panama*, extra fine pink, better color and larger than *America*.

Here is a list of the standard varieties I would plant outside, which of course includes varieties I have just mentioned: *Pink Beauty*, *Halley*, *Lily Lehmann*, *Klondyke*, *Electra*, *Willy Wignan*, *Intensity*, *Mrs. Francis King*, *Velvet King*, *Panama*, *America*, *Glory of Holland*, *Augusta*, *Niagara* and *Schwaben*. There are many more varieties but these are the best commercial varieties, I believe. If I were asked to name the ten best commercial varieties in different colors, I would name the following: *Lily Lehmann*, white; *Panama*, light pink; *Pink Perfection*, dark pink; *Halley*, salmon pink; *Electra*, light red; *Mrs. Francis King*, brick red; *Velvet King*, velvet red; *Niagara*, deep cream; *Schwaben*, light yellow, and *Klondyke*, yellow.

## Music and Flowers of Other Days.

(Continued from page 62.)

There was another porch, long, open and sunny, which was a veritable garden. There bloomed geraniums, monthly roses, ice plants, fuchias, petunias, pickle vine, dew plant, the calceolaria, which we called the old maid's pocketbook and has recently leaped into prominence as the knitting bag plant. Creeping Charlie and the Wandering Jew, well grown made wonderful hanging baskets, while maple ivy covered the walls. These supplemented by honeysuckles grown in the ground and trained up the posts made a Paradise for humming birds and butterflies.

As I look back I think I was living very close to nature in those days.

It was somewhere along that time that I first saw Gladioli in bloom, dazzling scarlet flowers which I suppose were of the *Brenchleyensis* variety, known even now as the most brilliant scarlet.

MRS. A. H. AUSTIN.

It may be a little late to advise with reference to planting cormels, but the suggestion will be just as good for another year. In advising that Gladiolus corms should be planted five or six inches deep it must be borne in mind that this is for first size corms. Cormels, which we wish to speak of especially, should not be more than three inches deep in a sandy soil.

## How to Prevent Cutworm Losses.

The U. S. Department of Agriculture, through its Weekly News Letter sends out some valuable information from time to time and we note recently an article on the above subject with illustrations from which we are pleased to extract information which is much more complete than has heretofore appeared on this subject:

Land to be planted to corn the following spring, especially such land as has laid in grass for a considerable time and is likely to contain cutworms, should be plowed in mid-summer or early fall about the time the eggs are laid or, better, before the eggs are laid, for then vegetation which is suitable for the moths to lay their eggs upon is removed. The earlier the preceding year grass-lands to be planted to corn are plowed, the less will be the probability that cutworm moths will have laid their eggs thereon, and the less, consequently, will be the danger of injury by cutworms the following year.

Late fall and winter plowing of grasslands, although not as effective as early plowing, will destroy many of the hibernating cutworms, as well as such other important corn pests, and should be practiced when earlier plowing is impracticable.

Pasturing hogs upon land supposed to harbor cutworms is a beneficial practice, as these animals root up and devour insects of many kinds, including cutworms, in large numbers. Farm poultry, if trained to follow the plow, will prove of inestimable value.

When cut worms are abundant on cornland, the use of poisoned bait is recommended. This may be prepared as follows: Mix 50 pounds of wheat bran, 2 pounds of Paris green or crude arsenic, such as the by-product from copper smelters, and six finely chopped oranges or lemons. Mix to consistency of stiff dough by adding low-grade molasses, adding water also when necessary. Middlings or alfalfa meal may be successfully substituted for bran. Distribute this bait over the infested field in small lumps; sprinkle it sparingly around each hill. In fields that are infested, distribute the bait as soon as the corn begins to appear above ground. Promptly replant the injured hills. During the warmer spring months cutworms feed mostly at night and burrow into the soil during the day, so that the bait usually will be more effective if applied during the late afternoon or early evening.

Cutworms often migrate to cultivated fields from adjoining grasslands. In such cases protect the crops by running a narrow band of the poisoned bait around the edge of the field or along the side nearest the source of infestation.

### DESCRIPTION.

Cutworms are the young of a number of species of brown furry moths. About mid-summer the full-grown cutworms burrow into the ground to change to pupæ, which soon transform to moths.

The moths lay their eggs on lower leaves of grass. The young worms feed on the grass during fall and in winter burrow into the ground for protection. In the spring the worms come out of the ground and attack almost any young plants they find at the surface. They feed at night, cutting off the stems close above the roots, and hide away in loose earth or under rubbish during the day. Later in the season they climb the stalks at night and feed on the leaves.

### CONTROL.

The best remedy for cutworms is *Poisoned Bran Bait* made as follows: Thoroughly

mix 50 lbs. of bran, 2 lbs. of Paris green and 6 finely chopped lemons. Stir to a stiff dough with low grade molasses diluted with enough water to mix well with the bran.

Scatter sparingly in small lumps around bases of plants and over entire field.

Grassland is most liable to infestation by cutworms and if intended for corn or other crops should be plowed the preceding summer to destroy the grass as a breeding place for the moths.

*Beware of poisoning poultry.*

The worms prefer the bran bait to the plants. Since they usually hide before they die the dead ones will seldom be seen.

## Flower Garden Hints.

Do not make the mistake of planting annuals too near together. Asters, Verbenas, Poppies, Calendulas and Zinnias do much better if planted a foot apart, where the soil may be kept loose and friable.

Primroses that have been blooming in the winter window garden should be separated and placed in a cool northern location. The buds should be carefully pinched off and not allowed to mature. This method will promote leaf growth, and strong, stocky plants for winter. I prefer these plants to seedlings for abundant bloom.

I am especially fond of the sweet double English Violets; but at times have had difficulty in growing them well. A friend knowing my love for them gave me a generous clump last spring. We planted them in a sheltered northern nook. Gave them a mulching of rotted manure in the fall and this spring were repaid by a wealth of bloom.

So many people have said to me, "My Daffodils fail to bloom, just grow up to slender leaves in a year or two after setting." I am going to repeat what I have said more than once in these columns. "Do not cut off the foliage of any of the spring blooming bulbs until they mature and turn yellow and die down." If cut off by the lawn mower or scythe before this, the bulbs are not matured and consequently fail to bloom year after year.

Although admiring tuberous-rooted Begonias I have never attempted growing them until this year. The bulbs were secured from a reliable florist. Placed in soil composed of one-third rotted manure, the remainder good loam with a slight mixture of sand. They are already (about nine days after planting) showing pink leaf buds. I am keeping them in a warm, moist dark location until roots form.

Seedling Pansies are excellent plants to place in the tulip beds between the bulbs. They come into bloom almost as quickly as the tulips fade and soon cover the beds.—MRS. ELLA F. FLANDERS in *Rural Life*.

How late may Gladiolus corms be planted with success? Well, it depends on where you are located, but in New York State plantings may be made as late as July 1st with success under average weather conditions. This will give bloom from the last half of September through October, depending on varieties.

## The Great Water Lily.

BY WILLARD N. CLUTE in *American Botanist*.

Probably the most gigantic leaves in the world are those of the great Water Lily, *Victoria regia*, which grows in the quiet waters of northern Brazil and Guiana. Paul Marcoy, an early traveller, claims to have measured some that were more than twenty-four feet in circumference. In temperate regions, where the plant may be grown in warm pools, the leaves are much smaller, but even then may reach a diameter of three or four feet. An interesting peculiarity about them is the fact that the edges are turned up for several inches all around, the leaves thus presenting the appearance of large shallow pans. The turned up edges serve a practical purpose and keep the upper surface of the leaf from getting wet.

Although old leaves are, as so frequently pictured, quite circular, the

The group to which *Victoria regia* belongs is not a large one, but it contains a number of interesting plants. The American lotus (*Nelumbium luteum*) has much in common with its relative of the Amazon. Like it, the leaves are circular with the petiole in the center and the flowers are often as large as a quart bowl. The pink species so often cultivated in parks is the Egyptian lotus (*N. speciosum*) the only other member of the genus.

The Water Lily family (*Nymphaeaceae*) has always been something of a puzzle to botanists. It is ordinarily regarded as a dicotyledon, but some, on account of the structure of the plants, favor transferring to the monocotyledons. In most books it holds a place low in the scale being assigned to the order Ranales which includes, besides the type family Ranunculaceae, the Magnoliaceae, the Berberidaceae, the Calycanthaceae and several others. A more than passing resemblance may be found in the blossoms of the whole



first leaves are narrow and elongated, the next are heart-shaped like ordinary Water Lily leaves and only the older ones are peltate with the petiole in the center. Even in the old leaves a distinct line shows where the lobes of the leaves have been joined. Leaves of this kind are strong enough to sustain the weight of good sized children. In their tropical home the great leaves form an almost impassable barrier to navigation. Tropical birds are said to wander over them in large companies searching for food.

The flowers, in keeping with the size of the leaves, are often more than four feet in circumference. Usually they are somewhat smaller but blossoms with a diameter of a foot are common. The plant rarely flowers in the temperate zone, but may be induced to do so by keeping it at the proper temperature. It appears to have first flowered outside of the tropics at Philadelphia. The blossoms are like those of the common Water Lily in shape. Outside they are pure white and shade to a deep pink within.

group. This is especially striking in the flowers of the Peony, the Mandrake, the magnolia, and the calycanthus.

Reports of severe winter killing have reached us and in the Editor's garden damage has resulted which has not been before experienced. Our collection of roses without artificial protection has practically been annihilated with the exception of some of the more hardy sorts. About half of our Iris bed was killed apparently because part of it was protected by snow or otherwise. There are no cormels left in digging last fall which are sprouting this spring except in isolated cases where specially protected.

The damage which has resulted is largely because of severe freezing in early winter before the snow cover came to protect vegetation. While snows were frequent during the winter, yet there was no large body of snow on the ground at any one time and the long-continued cold weather was almost without precedent.

## The Everlasting Pea.

The Sweet Pea, because of its beauty and fragrance, appears to fill all that could be desired in the way of flowering Peas, and may account for the absence from many gardens of the Everlasting Pea. There are, however, places where this hardy herbaceous Pea could be placed and which it could fill to great advantage. It is not only hardy and of perennial nature, but has, as well, the merit of flourishing in almost any soil, flowering profusely and in many colors the whole season through. It is not a vine to set with others in herbaceous collections unless it is to form a background and be provided with something to ramble over. It is a thrifty, strong grower, delighting to ramble over rocks, stumps of trees, or a trellis where free growth can be accorded it. When once planted it cares for itself ever after, giving flowers in abundance the whole Summer long.

The normal color of the Everlasting Pea appears to be pink, but there are white, dark purple and other varieties of it. Its perpetual flowering is much in its favor, and use is found for cut flowers of it; the white one is often planted by florists for the sake of its flowers, which prove so useful for their work in Summer when white flowers of this description are so scarce. It is unfortunate that this hardy Everlasting Pea has no odor. There are records of attempts being made to hybridize it with the Sweet Pea in order to obtain this, but without success. What a prize a hardy, sweet scented Everlasting Pea would be!

This hardy herbaceous Pea climbs by its leafy tendrils, the same as the Sweet Pea does, so it requires something to attach itself to, if height is required instead of its merely forming a bushy mass resting on the ground. A pile of rocks or brush is just what it likes to climb about. It is never suited when allowed to trail along the ground.

Though the Everlasting Pea is not sweet scented, it has the advantage of being perpetual, as well as having larger flower clusters than the common Sweet Pea. Where once planted it grows afresh from the ground every Spring, forming its flowers the season through. That the flowers are not sweet scented is to be regretted.—*Florists' Exchange*.

### God's 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 light 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 lilies and bowers of roses,  
Were laid by the hand of God.

The kiss of the sun for pardon,  
The song of the birds for mirth—  
One is nearer God's heart in a garden  
Than anywhere else on earth.

—D. F. Gurney.

# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 7

July  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

### Vegetables vs. Flowers in War Time.

BY BERTHA BERBERT HAMMOND.

[Written expressly for *The Flower Grower*.]

THE VEGETABLE garden has certainly come to its own. Never has the gentle art of growing vegetables received such an impetus and never has so much gratuitous and promiscuous advice on vegetable raising been disseminated. Unfortunately, much of this information has been so impracticable or conflicting that it is no wonder that many a beginner has been completely bewildered or discouraged.

In their excessive enthusiasm some writers have advocated gardening schemes that are far from feasible. Others not satisfied with trying to discourage the cultivation of flowers, "the stars of the earth," have endeavored also to restrict even the production of fruit, contending that fruit is not essential as food, and that the time spent in its cultivation is, therefore, wasted. Absurd! Fruit is wholesome and nourishing, and has considerable medicinal as well as food value, and if its use were more general (particularly in the sections where it is raised) one source of great waste would be checked, a saving of less perishable foods thus made possible, and some of the congestion caused by the transportation of the fruit lessened. Another extremist urges the plowing of one's flower garden and lawn and the planting of potatoes in "such useless plots." While conceding that the potato stands very high as a "wheat saver" and should for that reason, if for no other, be planted freely, yet, surely there are more suitable plots for the cultivation of this wholesome but humble tuber than on the front lawn. For even in these serious times, when we must adapt ourselves to so many new and changed conditions, suitability may still claim consideration. It is not yet necessary to "starve the soul to feed the body" and though it may be expedient to curtail expenditures of time and money, let us care wisely for the flowers that we have (particularly perennials) and add new ones as liberally

as conditions will permit. An extra hour of daylight saved and devoted each day to the care of flowers, will bring its own reward. Flowers appeal to the best and highest in mankind.



GLADIOLUS—PHOEBUS.

Introduced by Lemoine & Son and described by them as "azure blue dotted purple and cream." Also described as rich, dark violet blue, the lower petals having large blotches of crimson maroon and primrose. The latter is the better description of the flowers in the photograph, which was taken on the 4th of August, 1917. The spikes had 13 and 14 pips respectively.

(SMILAX.)

Their refining and comforting influence is far reaching. They bring consolation to those in sorrow, and increase the joy of those who are fortunate or happy. If ever we needed their soothing, inspiring influence, we need it now. Give up one's flowers entirely to cultivate vegetables? Emphatically "No." "Man can not live by bread alone."

Fortunately there are a number of plants from which one may obtain both flowers and food. The Nasturtium bears a beautiful flower and its pungent seed is excellent for pickling purposes. The Scarlet Runner Bean and its cousin, the Butterfly Runner Bean can scarcely be surpassed for their profusion of showy, attractive flowers and their abundant crops of large edible beans that can be used either as string or shelled beans. Climbing beans may also be used to advantage to cover and beautify unsightly stumps, fences, sheds or even the porch trellis. They will cover the porch as quickly as the usual annual vine and the foliage is quite as ornamental. You will then have not only the beauty and shade but many a meal of nourishing beans. As pole beans yield a food that is rich in protein, raise plenty of them. Instead of erecting bean poles which are not only unsightly but in some localities difficult to obtain, plant an old-fashioned, tall-growing sun-flower near each hill of beans and let Crease Back, Lima or other climbing beans twine around the stalk. Keeping most of the large leaves trimmed off the sun-flower plant, will tend to make the stalk grow taller and stronger and will also admit additional sunlight to the clinging bean vines. When mature, the seeds of the sun-flower find a ready market as poultry food; the stalks or stems are useful as fuel and the ash obtained by burning them containing as it does a very large percentage of potash (62%) is at this time of shortage of potash very valuable as a fertilizer.

[Concluded on page 78.]

# The American Gladiolus Society.

Preliminary Schedule of the Ninth Annual Exhibition of the American Gladiolus Society to be held in Elmwood Music Hall, Buffalo, New York, August 14, 15, 16 and 17, 1918.

## SCHEDULE OF PRIZES.

### OPEN TO ALL.

1st 2nd		
No. 1—	\$12.50 \$7.00	Best collection, 20 varieties, 5 spikes each, named.
No. 2—	7.50 5.00	Best 12 varieties, 3 spikes each, named.
No. 3—	6.00 3.00	Best 12 vases, 12 varieties, 1 spike each.
No. 4—	10.00 5.00	Five vases, 5 varieties, 10 spikes each, predominating color Yellow.
No. 5—	7.50 5.00	Vase of 25 spikes, <i>Primulinus Hybrids</i> , Orange.
No. 6—	7.50 5.00	Vase of 25 spikes, <i>Primulinus Hybrids</i> , Yellow.
No. 7—	7.50 5.00	Vase of 25 spikes, <i>Primulinus Hybrids</i> , any other color.
No. 8—	4.00 2.00	Six spikes, White, one variety named.
No. 9—	4.00 2.00	Six spikes, Yellow, one variety named.
No. 10—	4.00 2.00	Six spikes, Pink or Blush, one variety named.
No. 11—	4.00 2.00	Six spikes, Crimson or Red, one variety named.
No. 12—	4.00 2.00	Six spikes, Blue or Purple, one variety named.
No. 13—	4.00 2.00	Six spikes, Ruffled, one variety named.
No. 14—		Best seedling Gladiolus never before exhibited. American Gladiolus Society's medals. First prize, Silver Medal; second prize, Bronze Medal.

G. D. Black, Albert Lea, Minn.

No. 15—Best 12 spikes *Golden King*. First prize, 60 bulbs *Blackhawk*; second, 40 bulbs *Blackhawk*.  
No. 16—Best 12 spikes *Blackhawk*. First prize, 60 bulbs *Golden King*; second, 40 bulbs *Golden King*.

W. Atlee Burpee & Co., Philadelphia, Pa.

No. 17—Best and most distinct new seedling, 6 spikes, never exhibited before the American Gladiolus Society. Offers as first prize a Silver Cup, known as Burpee Trophy, and \$5 cash. Second prize, \$5 cash.

Homer F. Chase, Wilton, N. H.

No. 18—Best 10 spikes *Mrs. Watt*. First prize 200 first-size bulbs *Mrs. Watt*. Second prize 100 first size bulbs same variety.

Earl Edgerton, Lansing, Mich.

No. 19—Best new Yellow Seedling nearest in color to *Golden Spur* Narcissus. First prize, \$5 worth of bulbs winner's selection. Second prize, \$3 worth of same.

Willis E. Fryer, Mantorville, Minn.

No. 20—For best 12 spikes *Mrs. W. E. Fryer*. Offers 50 bulbs of that variety.

Austin-Coleman Co., Wayland, O.

No. 21—For best new Yellow variety, 3 or more spikes, \$5.

Munsell & Harvey, Ashtabula, O.

No. 22—Best vase any Red variety not less than 10 spikes. First prize 30 bulbs *Hazel Harvey*. Second prize, 25 bulbs same variety.

Miss Gretchen Zang, Ravenna, O.

Austin-Coleman Co., Wayland, Ohio.  
No. 23—Vase 6 spikes *Gretchen Zang*. First prize, Silver Cup valued at \$15, offered by Miss Zang. Second prize, 50 corms *Gretchen Zang*, offered by Austin-Coleman Co.

C. W. Brown & Son, Ashland, Mass.

No. 24—Best 3 spikes any new seedling never before shown. Offers 25 bulbs *Mrs. O. W. Halladay*.

THE FLOWER GROWER, Calcium, N.Y.

No. 25—To every exhibitor in the Open Class, not already a subscriber to THE FLOWER GROWER, one year's subscription.

### FOR NON-COMMERCIAL GROWERS.

1st 2nd		
No. 51	\$10.00 \$5.00	Collection 10 named varieties, 3 spikes each.
No. 52—	10.00 5.00	Largest collection Ruffled varieties, 3 spikes each.
No. 53—	5.00 2.50	Six spikes, White, one variety named.
No. 54—	5.00 2.50	Six spikes, Yellow, one variety named.
No. 55—	5.00 2.50	Six spikes, Pink or Blush, one variety named.
No. 56—	5.00 2.50	Six spikes, Crimson or Red, one variety named.
No. 57—	5.00 2.50	Six spikes, Blue, Purple or Lavender, one variety named.
No. 58—	5.00 2.50	Six spikes, any other color, one variety named.

### 1st 2nd

No. 59—	3.00 2.00	Three spikes, White, one variety named.
No. 60—	3.00 2.00	Three spikes, Yellow, one variety named.
No. 61—	3.00 2.00	Three spikes, Pink or Blush, one variety named.
No. 62—	3.00 2.00	Three spikes, Crimson or Red, one variety named.
No. 63—	3.00 2.00	Three spikes, Blue, Purple or Lavender, one variety named.
No. 64—	3.00 2.00	Three spikes, any other color, one variety named.
No. 65—		Best exhibit of at least 15 varieties correctly named. 3 spikes each. American Gladiolus Society's medals. First prize Silver Medal. Second prize Bronze Medal.
No. 66—		Best and largest exhibit of new varieties introduced in 1917 and 1918, at least 10 varieties, 1 spike each, named. American Gladiolus Society's medals. First prize Silver Medal. Second prize Bronze Medal.

Charles F. Fairbanks, Boston, Mass.

### 1st 2nd

No. 67—	\$ 5.00 \$3.00	Vase 10 spikes <i>Primulinus Hybrids</i> , Orange.
No. 68—	5.00 3.00	Vase 10 spikes <i>Primulinus Hybrids</i> , Yellow.
No. 69—	5.00 3.00	Vase 10 spikes <i>Primulinus Hybrids</i> , any other color.
No. 70—	5.00 3.00	Vase 12 spikes <i>America</i> .
No. 71—	5.00 3.00	Vase 12 spikes <i>Mrs. Frank Pendleton</i> .

T. A. Havemeyer, New York, N.Y.

No. 72—	5.00 3.00	Vase 12 spikes, White, one variety.
No. 73—	5.00 3.00	Vase 12 spikes, Pink, one variety.
No. 74—	5.00 3.00	Vase 12 spikes, Red or Crimson, one variety.
No. 75—	5.00 3.00	Vase 12 spikes, Yellow, one variety.
No. 76—	5.00 3.00	Vase 12 spikes, Blue, Purple or Lavender, one variety.
No. 77—	5.00 3.00	Vase 12 spikes, any other color, one variety.

Arthur Cowee, Berlin, N.Y.

No. 78—	\$ 5.00	Best vase 25 spikes <i>Peace</i> .
No. 79—	5.00	Best vase 6 spikes <i>Peachblow</i> .
No. 80—	5.00	Best vase 6 spikes <i>Papilo Kose</i> .
No. 81—	5.00	Best vase 6 spikes <i>Dawn</i> (Groff).
No. 82—	10.00	Best vase 6 spikes <i>Afterglow</i> .
No. 83—	10.00	Best vase 1 spike each of <i>War</i> , <i>Peace</i> and <i>Prosperity</i> .

H. E. Meader, Dover, N. H.

No. 84—Best 6 spikes *Myrtle*. First prize cut glass vase valued at \$5; second prize, 20 corms of *Myrtle*; third prize, 10 corms *Myrtle*; fourth prize, 5 corms *Myrtle*.

The Henry F. Michell Co., Phila., Pa.

No. 85—Best 6 spikes, all different, one vase, comprising the best display and most harmonious color combination, no preference being given to named varieties. First prize, Michell Silver Medal; 2nd prize, Michell Bronze Medal.

P. W. Popp, Mamaroneck, N.Y.

No. 86—Best 6 vases, 6 varieties, one spike each, predominating color Blue, Purple, Lavender or Mauve. First prize, \$3.00; second prize, \$2.00.

THE FLOWER GROWER, Calcium, N.Y.

No. 87—For the best display of Gladioli consisting of not less than 10 spikes nor more than 20 spikes. Not more than 3 spikes of any one variety. No preference to be given to named varieties. First prize, a life subscription to THE FLOWER GROWER. Second prize, a five-year subscription to THE FLOWER GROWER. Third prize, a two-year subscription to THE FLOWER GROWER.

## Platycodon.

This is a desirable hardy plant, and always blooms the season planted. After the third season each plant will have ten or more stalks covered with blue and white flowers, and some will be veined blue and white.

I have noticed a variation in this color which I call drab.

Last season I discovered some double flowers among some seedlings. These

were marked, and planted by themselves on November 21st, and I may be able to produce double varieties from seed from them. This may be a freak for only one season, but they will be watched, and their behavior reported later on.

They are very hardy for those plants planted Nov. 21st and not mulched are all alive.

Have the crown of the plant one inch below the surface when planted.

WILLIS E. FRYER.

## Growing Interest in Floriculture.

It is very evident that the interest in floriculture is growing very rapidly. Until recently it was a rare thing to find agricultural colleges devoting more than a small space and very little time to the teaching of floriculture. Experiment stations did not consider the subject of sufficient importance to give it any consideration at all. It is now quite different. The experiment stations of almost every state are either devoting quite a lot of space and time for the making of tests and experiments of almost every kind, and in the agricultural colleges floriculture is one of the leading subjects taught. With the facilities now at the disposal of the florists for research work there should be no question let go unnoticed that is of importance to the cultural end of the business. Experts who are employed for this purpose should be called upon frequently.—*Southern Florist*.

## Watering Peonies

### During a Drought.

H. W. Groschner, Ohio, writes that they have experienced a severe drought and suggests that we say something about the value of watering Peonies during such a time.

If thoroughly done a good heavy watering should last from two to three weeks depending on nature of soil, etc. The best way to water is to make a basin around the plant, filling it with water three or four times to thoroughly saturate the soil deeply, and then filling the basin with loose soil. On top of the loose soil a mulch of grass or any loose material can be placed. If water is not too far distant this method of keeping Peonies in strong growing condition before and during blooming period, need not be laborious or expensive, and the same general scheme could be utilized for watering of other plants as well as Peonies.

## You Should Exhibit at

### the Buffalo Flower Show.

If possible Gladiolus growers should make entries and show at Buffalo. This applies not only to the professional or commercial growers but to amateurs as well. The Non-commercial classes offer a good array of prizes for the amateur regardless of quantity of bloom he is producing, the small grower being appealed to as well as the large one.

Visiting the flower show is educational in itself, but visiting the show and showing your bloom in competition with that grown by others is still more educational.



## THE PEONY

### Banish the Peony that Will Not Bloom.

Almost every one of us has in his garden or on his lawn one or more Peony plants that never bloom. Some of them annually produce promising buds which invariably fail to develop fully, while others never make any attempt whatever toward flowering. We nurse and coddle them for a few years, then tolerate them for another term of years, ever hoping against hope that they will sometime reform and reward us by producing flowers. This hope springs from a knowledge that some varieties of Peonies require several years to mature sufficiently to begin flowering, but comparatively few require more than two or three years at most from planting; in fact, if strong divisions or heavy roots are planted, most varieties should begin to bloom the following spring.

The persistent failure of a Peony to bear flowers may be caused by any one of several reasons, but it is generally incurable, and the plant that does not reward our efforts to make it bloom is not worth the room it takes and its place should be occupied by one that will. I know it requires strong fortitude, backed by firm determination to get up sufficient courage to eliminate the slacker of the garden, but let us all make resolve, here and now, that we will give these delinquents but one more chance—if they do not flower this coming June, their doom is sealed, and on July first they go to the rubbish heap.

Persons who have room for only a few Peonies usually want varieties that are sure bloomers, and fortunately, there are a considerable number that are especially noted for this quality. In making selection, if unacquainted with the merits of the different varieties, one had better seek the advice of an experienced friend or consult the catalogue of a reputable Peony specialist, and select those that are recommended to be "reliable bloomers," or "of good habit." In most catalogues directions are given for proper planting, and these directions may well be followed carefully, for it is a fact that many cases of failure may be traced to improper planting practices, such as planting too deeply, or planting in direct contact with manure, both of which the Peony resents.

There are some varieties, and choice ones at that, which produce flowers more or less liberally on young plants, almost invariably flowering the following spring if planted in September. *Umbellata Rosea*, *Asa Gray*, *Livingstone*, *Duchess de Nemours*, *Jeanne d'Arc*, *Mad. Calot*, *Modele de Perfection*, *Mad. Emile Galle*, *E. G. Hill*, *Milton Hill* and *Eugenie Verdier* are a few of many varieties of merit that will not disappoint the person who is looking for reliable bloomers that will give

quick returns. Of course those two sterling varieties, *Festiva Maxima* and *Mons. Jules Elie*, should comprise the foundation of every collection, large or small, and it is taken for granted that every Peony lover already has them.

H. G. READING.

### Peony Bloom for Red Cross.

The experience of one of our readers in Illinois in connection with the sale of Peony bloom for the benefit of the Red Cross will be helpful to others who are interested along this line. Our subscriber writes as follows:

"We offered five hundred dozen Peonies to our local Red Cross to be sold for their benefit. They had three sales during the blooming period, which lasted about three weeks, and then in addition took orders for delivery on salesday. One of our local factories offered their automobile truck with two men and attended to all transportation and deliveries. The first day of the sale Peonies were cut the night before and tied in bunches of twelve. The truck was sent for them about eight in the morning, taking 110 dozen and at 10 A. M. automobiles were at the house again for more as the supply had been exhausted. The sale for that day was about 180 dozen at 50c. per dozen.

"Another sale was held during the afternoon and evening from 4 to 10 P. M. and the news of the sale having been advertised in various ways many people from out of town ordered in advance or came to buy. The 500 dozen were sold at 50c. per dozen netting the total sum of \$250 for the Red Cross.

"We expect to do the same thing each year and every member of the Red Cross watches the weather before blooming time fearing some harm may come to the Peonies."

[Surely no better or more appropriate way of raising money for the Red Cross can be devised than the sale of flowers. Let us have the experience of others on this subject.—ED.]

### Vegetables or Flowers?

"The war garden," sings the *New York World*, "must flourish and bloom in that beauty which is service. Its richness must be vegetable not floral."

And that is true and right enough. It is the doctrine of the Agricultural Department, of food conservationists and war-winners of all sorts and affiliations. We may accept without argument the principle that it is vegetables rather than flowers that ought to be raised in this year of the war lord, in order that the lord of peace may come soon. The vegetable garden is to be preferred to the flower garden. Dietetic necessity wins over esthetic indulgence.

But must we therefore have no flowers? Far be it from any community or any individual to swallow this food gospel with such grim literalness as to have no flowers about

him this year save the dubious blooms of his vegetable beds. Man shall not live by bread alone, nor by beans, peas, tomatoes, carrots and turnips. Along with things to feed the body there must be also food for the soul.

This year of all years, we need beauty and fragrance to soften the hard realities of life. The fierce struggle, the violence, the bloodshed, the primitive beastliness that war has revived on so vast a scale, need some antidote to make us remember that they are not the normal order of things. And what more potent antidote can we find for war's ugliness than flowers?

Let us have some flowers, by all means. They are content to grow on the edges of vegetable beds, to get along with odd scraps of soil and stray bits of sunshine.

### Wood Ashes as Fertilizer.

[Written expressly for *The Flower Grower*.]

The Ohio Experiment Station advises the use of from 400 to 500 lbs. per acre of a mixture consisting of two parts wood ashes and one part acid phosphate or bone meal. Such a fertilizer may be used to advantage on most any crop and the lime contained in the wood ashes (about 40%) will have a beneficial effect on acid soils. The potash contained in the wood ashes does not give its full value unless used in connection with phosphorus in some form.

The potash contained in unleached hard wood ashes, about 5%, is readily soluble in water and, therefore, ashes should not be stored out of doors unprotected from rains. As wood is being burned now more largely during the coal shortage, it is important that care should be given to the ashes resulting. Thousands of dollars are wasted annually by failure to properly store ashes as they accumulate. In fact, in many cases the ashes are simply thrown out in the road and their fertilizing value lost. They should be stored in a tight receptacle of metal as many fires have resulted from putting ashes with live coals in them into a barrel or other wooden package.

Potash as a fertilizer is especially needed on sandy soils and as sandy soils are especially adapted to the growing of Gladioli we would urge Gladiolus growers especially to burn all the wood possible and secure all the wood ashes they can from other sources under present conditions. No potash is coming forward from the largest source of supply which is located in Germany and, therefore, wood ashes as a source of potash should be given special attention now.

Wood ashes may be wasted by applying in too large quantities. Four hundred to five hundred pounds per acre of the mixture above referred to is only about three pounds per square rod and one-fifth of an ounce per square foot. A plot of ground 10 ft. x 10 ft. would, therefore, receive only about 1¼ pounds of the acid phosphate-wood ashes mixture. It might be suggested, however, that for garden purposes double this quantity would not be excessive or even three times this quantity, but we should not advise using more than three times what the Ohio Experiment Station recommends.

MADISON COOPER.

## The Flower Grower

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"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### Knife or Scissors for Cutting Flowers?

Considerable has been written on the subject of cutting flowers for development in water in the house or for shipping purposes and so far as we are aware, authorities all agree that a knife should be used and a slanting cut made. The Editor, perhaps foolishly, fell into the habit of cutting with scissors, using a large 6 inch pair of blunt ended scissors similar to those used by drygoods clerks. He has been criticised from time to time for doing this and is willing to admit that he is wrong. To bring out the points at issue, we are pleased to print herewith from a letter on this subject written us by H. E. Meader, of Dover, N. H. Mr. Meader has so carefully analyzed the subject that we believe that all flower lovers will be interested in what he has to say. Mr. Meader writes as follows:

As the Gladiolus spike has so fleshy a stem, no doubt it would take up water enough to blossom out to the tip anyway even if cut with scissors or broken off. However, the florists say on hard stemmed flowers it is a benefit to slit the stem up an inch or so, splitting into halves a short distance from the cut end.

I have had trouble with extra long stemmed Roses and also Chrysanthemums, when placed in a warm room, the flower and perhaps several inches of the stem next to it would droop. Probably the heat would evaporate the moisture, or rather the flower gave off same faster than its capillary system could supply it. I have tried splitting the stems which exposed a larger surface to the water and remedied conditions almost immediately.

I have noticed that cut Gladioli if left standing in water without changing or cutting the stems, in the course of a week, the flowers blooming along the spike as usual would commence to droop as they reached the end of the spike and the last few would be pale in color, below normal size and the stem very weak and flabby. The end of the stem when taken from the water would be spongy, dark in color from the impurities sucked up with the water, and probably this helped to clog the tiny canals which supply the flowers with nourishment.

Last year I had a pail of cut Glads which sat around a week and were all in a lopped over, faded-out condition so thought I would see if they would recuperate if fixed up a little. I cut about two-thirds of the stem off and changed

the water and they immediately straightened out and came back wonderfully.

All this gave me the impression that it is of prime importance to keep cutting a little off the stems for best results and the cleaner the cut, the better the cut end would perform its functions. I suppose the most sensible thing to do would be to dump the blooms anyway after they are nearly all out but some varieties we like to hang on to until the last flower has faded.

Note by the Editor:

Theoretically there is no doubt but what a knife cut is in every way superior to a shear cut, but it is the Editor's impression that it would be difficult to tell the difference between a knife cut and a shear cut made at the same slant across the stem. Anyway, the 6 in. pocket shears are such a handy thing to slip into the top vest pocket, and are always ready for action, that compared with a knife they are superior in every practical way. However, we are not advocating the scissors to those who like the knife, and, in fact, do not advocate the scissors anyway. We simply fell into this habit through familiarity with pocket scissors and carrying them at all times for use for many different purposes. Commercial growers doubtless all use a knife and probably many of the amateurs, but scissors seem to serve the purpose pretty well for us and we do not expect to change even though we know they are not the right tool to use.

### Division of Prize Money at Flower Shows.

Those who offer prizes at the flower shows should think over the subject carefully. We are decidedly of the opinion that prize money should not be given chiefly to the first prize winner. Suppose, for instance, that \$10 is available as prize money in any particular class. Why not give \$5 of it to the first man, \$3 to the second man and \$2 to the third man? Surely it is unfair to give the man making the best show all of the prize money or pretty nearly all of it. It should be honor enough to win a first prize and usually the first prize winner would be content to take one-third or one-half the money. We think that a fair division of prize money would be in the proportion of 4, 3 and 2. In other words, if \$9 were available, give \$4 of it to the first man, \$3 to the second man and \$2 to the third man.

Furthermore, if it were more common to offer a first, second and third prize (or possibly a fourth prize where there is considerable money available) it would tend to bring out a much larger show, as exhibitors would know that if they could not win first place, they would surely have a chance of winning second, third or fourth place.

Think this over you who offer prizes and put yourself in the place of the fellow who is exhibiting.

### Destroy the Common Barberry.

The Department of Agriculture has issued an order that all the common Barberry be destroyed. It has been demonstrated, we understand, that this particular form of the Barberry, known as *Berberis vulgaris*, harbors a disease deadly to grain crops and especially to wheat. In many places the Barberry furnishes a wonderful bit of color for the autumn landscape which will be greatly missed, but we cannot afford under present war conditions to harbor anything which is destructive to wheat. It should be noted that the common Barberry is not the Japanese Barberry (*Berberis Thunbergii*). The latter is altogether harmless, and one horticultural writer states that the common Barberry is pro-German while the Japanese Barberry is 100% American.

## A War Time Flower Garden.

JOHN JOHNSON, (Massachusetts,) in *Gardeners' Chronicle of America*.

THE STORY OF WAR gardens and the conservation of the various forces calculated to win democracy for the entire universe is a story now growing old, but not without interest. Our entry into the world war signalized a great reinforcement to the allied cause, a reinforcement such as the spirit of co-operation could alone establish. Community war gardens were planted, and everywhere a strenuous effort was waged to increase the nation's food supply by this simple means. We have a new "crop" of gardeners, and in this class are many worthy of encouragement, while a few—indeed a very few, we must disparage. The few we disparage are those who, inebriated with the spectacular significance of the operation, wrought destruction on their home grounds. At the hands of a few persons only too eager to display a willingness to "do their bit," lawns and flower gardens alike suffered much abuse. The devastation of pleasurable retreats was quite uncalled for, and as for the amount of growing space thus rendered available for food production, it was indeed a negligible quantity. Far from "Hooverizing" or otherwise "mobilizing" the forces by which this war must be won, such practices at once betoken dissipation of valuable resources, the wanton abuse of material, time and energy. Appropriately and very justifiably must we bend the balance of both mental and physical force in favor of vegetable culture—the production of food-stuffs—but the abolition of flower gardening would at once be an act of intemperance akin to the most dissolute vice.

Grow some flowers. Make the garden fulfil its mission. If you would have a garden, make it attractive and interesting; drape it with lively hues and fill the air with refreshing odor.

With our resources this year taxed to the utmost extent, less sumptuous displays must perforce satisfy our ambition. Means have been radically circumscribed during the past year, and there seems little hope for any immediate improvement in this respect. It therefore behooves lovers of the flower garden to apprehend the possibilities of a display for the coming season that will involve the least possible expenditure of both time and money. The "aristocrats" of the garden—the things requiring greenhouse protection all winter—will be almost out of the question as bedding plants. In view of this limitation, let us then survey the field for ready and suitable material for planting the flower garden.

Considering a great proportion of really magnificent flowering plants may be economically raised from seed with ease and within a short space of time, the source of suitable material is not far to seek. Hardy and half-hardy annual flowering plants and others which lend themselves so admirably to a similar mode of treatment offer limitless variety upon which to draw for bedding purposes.

In this class of plants alone we have great diversity of coloring combining with qualities of freshness and elegantly tasselled foliage. For brilliancy and as cut flowers they stand unsurpassed. A careful selection of the different kinds renders possible a continuity of bloom throughout the entire growing season. There are some which are showy and lasting, others gay but fleeting. The first we would rank equal to the best of "true bedders," while the latter afford the advantage of everchanging displays, for those which do not remain in good shape the entire season through may, with a little careful planning, be replaced by others to

maintain a succession of bloom. The Pansies, Forget-me-nots and English Daisy raised from sowings made in the open ground last August are already giving of their best, and although very gorgeous indeed this display is but a foretaste of the array we plan to follow.

Sowings of all the hardy and half hardy annuals may be done with every degree of confidence from now on, and, of course, without the assistance of glass. The exact time of sowing the various kinds must be determined by local conditions and to meet certain demands, but for hurried displays the kinds which flower within a short time of sowing must be chosen. Such kinds as Alyssum, Shirley Poppy, Drummond's Phlox, Gypsophila and Balsam, well adapted for the purpose. For genuine bedding effects Stocks, Asters, Linums, Antirrhinum, Phlox Drummondii, Zinnia, Nemesia, Larkspur, Clarkia, Balsam, Salvia, Petunia, Verbena and Marigold are a few of the many really handsome subjects available. The list might be greatly extended and still include plants of equal merit and quite appropriate for the purpose of embellishment, but the few named may serve to illustrate our point. Pansies and Forget-Me-Nots may be had a blaze of color through May and June, but after this time the brightness will gradually vanish. The ground may then be given over to such kinds as Drummond's Phlox, or Antirrhinums for succession, and the beds will again be made attractive for another two months; as these begin to fade, this same ground can again be planted with either Stocks or Asters, and thus the display of flowers may continue until killing frosts put an end to them. What could be more pleasing at little expense, or give greater variety, than some such scheme of planting? Nor is this type of plant to which we have reference very exacting in its requirements. Many, indeed, are less tender and less fastidious regarding cultural treatment than is generally supposed. Under rough and ready treatment a vast number of them respond in astounding fashion. We have seen splendid masses of the most gorgeous coloring and delicate fragrance by broadcasting the seed of such kinds as the Shirley Poppy, Portulaca, Gypsophila elegans, Candytufts, Mignonette, Alyssum, Saponaria calabrica, Sanvitalia, Platystemon and Kaulfussia. Among these last named are plants which we know are capable of producing the most enchanting results when sown haphazardly in certain sunny positions, and upon certain poor and dry soils, which have proved otherwise almost prohibitive of cultivation. On the other hand, for the more damp and shady positions, we always have choice of some very valuable material in the Forget-Me-Not, Venus' Looking Glass, Pansy and Nemophila insignis. Again, for covering trellises with effect and for screening unsightly corners to admirable advantage, what could be more appropriate or more beautiful than Sweet Peas, Cobaea, Climbing Nasturtiums, and Convolvulus, or even that old-time warrior of the vegetable garden, the Scarlet Runner Bean? Lastly, and as a redeeming feature, for the purpose of giving a genuine touch of floral enchantment to the home in the depth of winter, we might grow a few, if only a very few, of the greatly despised "everlasting" examples of which are the Acrocliniums and Helichrysums.

Of vital importance it is that we grow vegetables and still more vegetables as food to maintain our physical force, but pertinent indeed is it that we neglect not the underpinning of our ideals—provide an occasional feast for the mind—grow some flowers!

### Raising Seedling Dahlias.

The most interesting thing in gardening is the raising of new kinds in flowers. Before beginning, one must be prepared for plenty of disappointments, but experience is gained thereby. The very best varieties must be selected. Young plants are best for seeding, and grow them as for exhibition, i. e., thinning out the shoots and disbudding, and the ground must be prepared by leaving it to lie rough through the winter, working plenty of manure in. Procure some nice sturdy plants, and place them out at the end of May, giving them plenty of room—four feet between the rows and three feet between the plants. Place a strong stake to each. By the end of July the side shoots will want attending. Gradually thin them out until about five of the best are left. More stakes will now be needed to secure them, but do not leave this too long, for strong winds will easily break them off at the joints. The plants must not be allowed to get dry, for that will mean failure. By the end of August they should be coming nicely into bloom. The first flower or so is not of much use for seeding, so is best cut off. One will find as time goes on that the flowers will show an eye as soon as the bloom is past its best. These are the ones we want. As the petals die off they must be pulled out—this is most important; and they will require to be gone over about every other day. A camel's hair brush is best for the purpose of cross fertilizing, which is done about mid-day on a dry day. Some flowers can be left to chance, for the bees will work among them with good results. Keep pulling the dying petals off until there are none left. The seed case will be almost closed by now. In a month or five weeks it should be fit for cutting, but unless the weather is frosty it is best on the plant. If it has to be cut in an unfinished state, cut with long stems, and place them in jars of water in a dry, airy place, where there is heat. Keep changing the water and take a little off the stems now and again. After about ten days, hang up to dry. They will soon start drying off, and will commence to open, but do not disturb the seed until the pod is completely dry. If the pods feel crisp you can expect the seed to be all right. February is a good time for sowing, using shallow boxes. A temperature from 60°F. to 65°F. is best. Some of the seeds will germinate in a week, while others will take as long as six weeks. These are the best, as a rule, so take more care of them. When the small seedlings are large enough, prick them off into other boxes. They will soon be ready for potting into small pots, and from these they can be planted out at the end of May in good ground. About a foot each way is plenty of room, for as soon as they start to flower so will the thinning out commence, for there will certainly be lots of bad ones. This is the most interesting time, for one never knows what to expect; a new shape or color might appear. Take care of anything you think an improvement, but only save the very best. One good one in fifty is a fair average.—*Journal of Horticulture*.

The Editor's five hundred feet of Japanese Barberry hedge, two years set, came through one of the most trying winters ever known in this section without the slightest apparent damage. The Japanese Barberry is one of the most useful and beautiful hedge plants for northern sections and it should be utilized and substituted for the common Barberry wherever possible. The common barberry, as noted on the opposite page, should be destroyed, but the Japanese Barberry must not be confused with it.

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

### Roguing the Glads.

ALL OF US are now eagerly watching for the early *Gladiolus* blooms and our happy anticipation almost equals the joy of realization, but sometimes there are unexpected surprises in store for us. If the New Beginner has that row in his garden planted to the lavender pink *America*, wouldn't he be surprised some fine morning to see a bright scarlet nodding at him as much as to say: "Here I am and I'm glad of it for I am beautiful enough to be grown in your garden even if you do prefer pink," and the New Beginner might possibly be perfectly delighted with it because he would have a "start" in another color and perhaps would say to himself that he would mark that flower some day before it faded. Now, Mr. New Beginner, if you think you will *ever want* that variety, don't tie a little string on it and then leave it. Go at once and procure a stout stake, sharpen one end of it so that you can drive it into the ground deep enough to stay and tie that *Gladiolus* to it in such a way that it cannot get away. If you happen to know the name of the variety, write it plainly so that it will not fade away with the summer rains and sunshine. Make the entire marking of this variety so conspicuous that when that boy you hire to help dig them—when you are in a hurry and it looks like stormy weather—comes to that one he will call out: Hey, what's this 'ere one tied to a stake? If all these things should happen, do not tell that boy to dig the bulb, go and do it yourself and if you should be digging with a fork or a spade just place it well under the bulb and raise it carefully, then slip your hand under and lift the bulb out being particular to gather all the increase of bulblets that may have formed at the base, and after marking a box or bag place in it the bulb and bulblets and whatever soil adheres to them and tie them up. Then, and only then will you have that dangerous bulb where it can do no harm, for that bulb, no matter how choice it may be, is a rogue.

The right way to rogue your *Gladioli* whether the plot be a large field or a row in your small garden and you a professional or an amateur, is to get them out root and branch as soon as they show color or the first bloom opens. The quickest way is to pull them out but it is not the safest for if the top should break off leaving the bulb in the ground there remains the danger of some one, at digging time, getting that bulb into the basket. Of course the top does not always break off but it is the occasional one carelessly left that does the damage, so go after that one with a trowel or knife (you should always carry a *Gladiolus*



knife) or even a sharp stone and get the bulb out. As *Gladioli* are coming into bloom the bulblets are green, perhaps I should say white, and do not break off easily, but after the flowers are gone they make their growth and will separate quickly from the parent bulb and there is always danger from loose bulblets.

When an old timer has bought planting stock at a good round price and rogues begin to show, he shakes his head in sorrow for he knows that trouble is in store for him, and perhaps for someone else also.

Now, let's suppose that just one bulblet from that scarlet variety, that Mr. New Beginner wishes to save might get into the basket with the pink ones. The chances are that it is a variety that increases rapidly. If it grows well it will probably bloom the second year, but under adverse conditions it may not until the third year, but whenever it does you will begin to realize the importance of careful roguing of stock when in bloom, for the increase of bulblets of at least one year, and two if it is a variety that is slow in coming into bloom, are in with the planting stock, and the choice pink that you had wished to keep pure, becomes only mixed stock to be eventually closed out at a low price to some one who can use it as a mixture.

I sometimes wonder how many miles I have walked in my lifetime work among *Gladioli*, watching for rogues. Up and down the long rows from the time the crop begins to bloom until the season closed, and I am justly proud of a voluntary testimonial which states that from ten bushels of bulblets purchased from us there were only two rogues when they came into bloom.

It is a satisfaction to have clean stock in the field and to furnish it to your customer and it is worth something to have the reputation of having pure stock.

Watch out for the rogues.

MRS. A. H. AUSTIN.

### New Hybrid Water Lilies.

Climatic conditions in St. Louis during the summer are admirably adapted to the growth of tropical Lilies. Within the last four years the aquatic collection at the Garden has been greatly augmented and the area of water devoted to this fascinating branch of floriculture considerably extended.

Water Lilies may be divided into two groups: (1) diurnal flowering, representatives of the two sub-groups, *Anecphyra* and *Brachyceras*, and (2) nocturnal flowering, more commonly called the "night bloomers," which are representatives of the *Lotus* group. During a bright August day flowers of the diurnal Lilies will be open between 7 A. M. and 7 P. M., but if the weather is dull and rainy they remain closed. In the night bloomers the flowers open at sunset and stay open until about 10 o'clock the following

morning. However, if the weather is inclined to be cloudy, they will remain open during the entire day, acting the reverse of the diurnal type.

The blossoms of the nocturnal Lilies are considered by many far superior to those of the diurnal, or "day bloomers," and thus many visitors coming to the Garden during the Water Lily season, are disappointed. With this in mind, a number of experiments are being carried on in an effort to improve and fix the few types of day bloomers, the present-day plants having resulted largely from insect pollination, especially the *Brachyceras* representatives.

The *Nymphaea capensis* and its varieties, commonly found in gardens, are far from the typical species. They are the crosses resulting from insect pollination, between the blue and rose, and possibly the Egyptian *N. caerulea*, until we find gradations of color from the darkest blue to deep pink. These, being self-pollinated, result in a breaking up into blues, pinks and dark pinks.

One method of selecting the color of Lilies to be planted out is to examine the under side of the young leaves, the color which appears here usually giving some indication of the ultimate color of the flowers. This somewhat haphazard method undoubtedly eliminates the tedious work of preparing the flowers for pollination, but is not to be advocated, as the true identification of the parents is always lacking in hybrids of this nature.

**Pollination.**—Probably the best month for experiments in pollination is August, when the plants have usually attained their maximum growth and are producing their best flowers. Intercrossing must be done at a time when the concave stigmas of the flowers are well filled with nectar, as without this fertilization cannot be accomplished. Experience has shown that the hours between 9:00 and 11 A. M. are best suited for this process.

Plants are selected which will produce the desired qualification in the progeny. The pistillate parent, or flower which is to bear the seed, is carefully emasculated in the bud stage. This should be done the day before opening, when the stamens are easily broken off and no sign of pollen has appeared. The bud is then allowed to close. The next essential factor is the total exclusion of all insects by enclosing the bud in fine cheesecloth and tying below the ovary. The staminate parent, or flower which is to supply the pollen, is then selected, also in the bud stage, and is protected in the same manner as the emasculated flower. Pollen should never be removed from anthers which have been exposed to the insect's trail, because of the possibility of foreign pollen being left behind. The second day the act of pollination is accomplished by the aid of a camel's-hair brush, the pollen readily adhering to the brush, especially if it is passed over the anthers with an upward movement. The pollen thus obtained is then deposited on the stigma which is filled with nectar, the nectar immediately changing to a light yellow color. The flower is then rewrapped, securely fastened to a stake, and a label attached indicating the cross. Within three weeks the seed will be ready for collection. —*Missouri Botanical Garden Bulletin*.

The month of June has been a very cold and backward one, not living up to the promise made by the last two weeks of May. However, *Gladioli* and other plants had such a good start in May that the month of June has not seriously retarded them although we learn of damaging frosts in some localities. *Gladioli* are not injured by light frosts.

## WAYSIDE RAMBLINGS

### FALL CARE OF GLADIOLUS CORMS.

The discussions in your magazine on advisability of cutting off Gladiolus tops at digging time have interested me. I have but a small collection but have experimented on all the different methods suggested in caring for them at the time of lifting and preparing them for winter storage. My experience, therefore, may be of interest to your readers.

If the tops were left on the bulbs the large grower would need a big addition to his storage place which would surely be a disadvantage even admitting that this were the better method. I do not think it is a good plan to bring the tops into the house if for no other reason than that the insect pests and their eggs may be concealed in the leaves. One year I left the tops on until they had dried and then cut them off before putting the bulbs on the shelves. The following spring we planted rather late owing to weather conditions and because of this delay quite a few of the bulbs had sprouted, every one of which was covered with grey lice. I had never had this trouble before nor have I had it since and I believe that it was caused by leaving the tops on as stated.

As leaving part of the tops on at digging time I can see no advantage in that, and then it is only a question of cutting all the tops off. When the bulbs are dug and the tops cut off close to the bulb, the bulb should be dried in the sun. This disposes of a great many risks of trouble for the next planting season. Where the top is cut off close to the bulbs, the bulbs take up very little space in storage, and they come through the winter in good condition for planting and there is very little tendency to sprout prematurely.

ESTELLE M. GILBERT.

### SOME OF FRYER'S NEW IRISES.

The early part of June I had the pleasure of visiting the nursery of W. E. Fryer of Mantorville, Minn. I was there most of the time for about three days. Credit must be given Mr. Fryer for being a splendid entertainer, for the things about the place, which he was willing to show me, were more than worth the time I spent there.

The nursery in general looked very good but above all what struck my eye, were his beautiful Irises. Mr. Fryer has many thousands of seedlings of his own from which he selects the fine ones he is selling. The one which appealed mostly to me was *Fryer's Glory*, which surely is a beauty of much promise. When we first entered the field where this one was growing, I noticed it at once. I asked Mr. Fryer the name and was told it was *Fryer's Glory*. I stood and admired it for a while then continued through the field seeing many more fine varieties, among them *Mrs. W. E. Fryer, Willis,*

*Kathryn, Clarence Wedge,* and too many others to mention here. After we spent several hours looking over the Iris, I suggested that we go back and see *Fryer's Glory* again, for going back and seeing this variety several times a day is no time wasted.

Each morning we were in the field as early as possible to see what new gem had come into existence that had never seen daylight before.

My only regret was that I was unable to stay long enough to see them all bloom.

ANTHONY B. KUNDERD.

### VARIETY DOUBLET.

I have read Mr. Kunderd's note in the January issue of *THE FLOWER GROWER*. I quite admit that I failed to discover any mention of it in his catalogues of 1916 and 1917. It would, however, have been interesting to read a note that the variety had been withdrawn for the reason now stated.

May I mention two other varieties introduced by the same firm, *K. P. 15* and *K. P. 30*, neither of which can I find in the 1918 catalogue. Some firms make a note in a subsequent catalog showing why certain bulbs have been discarded by them. May I give one or two illustrations from a Daffodil catalogue before me?

*M. J. Berkeley*, omitted, being so shy a bloomer.

*C. W. Cowan*, discarded 1910.

*Hon. Mrs. Barton*, a rather delicate grower in some soils, but a lovely flower where it succeeds."

Such notes are helpful to the amateur, and create confidence between grower and customer. G. C.

### PEELING BULBLETS BEFORE PLANTING.

When I began growing Gladioli in quantity 25 years ago I employed women and girls to remove the hard outer shell at their convenience before planting time. I found that if the inner delicate lining was punctured the bulblet was likely to decay before planting.

If bulblets are not allowed to become dry after digging the outer shells do no become so very hard. For handling small lots of bulblets I have found nothing so convenient as putting the bulblets in strong sacks made from burlap sacks, and the sacks packed in moist sand or moss. Anything to keep them moist. By bringing these into a warm temperature the bulblets will soon come into condition for quick growth. E.

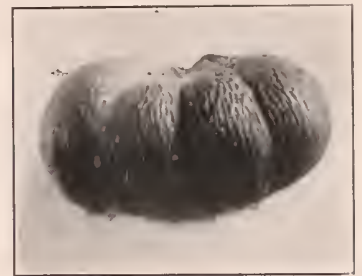
### PROPAGATING GLADIOLI FROM ROOTS.

I see by the December issue that a subscriber tried turning roots into sprouts and failed. Maybe he did not go at it right. It is distinctly a greenhouse proposition and the cut bulb must not be planted, but placed in moist pure sand and the root surface exposed to the light. C. M. S.

## Shipping Sample Delphinium Bloom.

We are in receipt of some beautiful Delphinium flowers from Ralph E. Huntington, Painesville, Ohio. Never having seen Delphinium bloom shipped as these were and probably some of our readers being unfamiliar with the method used, we will describe it.

The flowers are taken singly and simply flattened or pressed between strips of cardboard held in place with rubber bands and shipped in a strong ventilated paper box. It would seem that care needs to be taken in pressing to open the bloom so that the interior of the bloom will show flat against the cardboard. The samples sent by Mr. Huntington being in transit during cool weather have arrived in what we should call perfect condition, but he assures us that flowers pressed in this way will keep for at least a year.



Photograph of quadruple hard shell bulblet, mention of which was made on page 27 of the March issue of *THE FLOWER GROWER*. Photograph furnished by A. E. Kunderd.

We have recently heard from one of our subscribers in Australia stating that he has a duplicate of the freak above illustrated and that he has sent it to us for inspection. These freaks are interesting but of no considerable commercial value.

### To Preserve Roses.

To keep Roses when cut, the stock ought to be virile to begin with, and the following are the main points in brief:

Choose the strongest and healthiest.

Cut early in the morning before the sun beats on the flower.

Take the flower at a period when the petals are on the point of parting. Remember they open up very quickly, and must not be allowed to open up materially on the plant, or the life of the flower will be short after cutting.

Put in cold water, in a dark room—an ordinary cellar will do, of course 45° to 50° temperature would be ideal, but get as cool a place as you have available—not below 45°.

Leave the flowers there 24 hours prior to use and they will live and carry much better than if brought into the living-room at once after cutting.

When flowers are received, they ought to be placed in a dark, cool room for a few hours, to recuperate after travel, before entering on their trial stage in my lady's parlor.—*Gardener's Chronicle*.

One of our subscribers wants specific instructions for the dividing of Peony roots when they have become crowded and fail to bloom properly. Any helpful suggestions along this line will be appreciated.



[This department of THE FLOWER GROWER is intended to be one of its most helpful and valuable features. All questions asked in good faith and which are of general interest will have careful attention. The full name and address of the writer must be given, but not for publication.]—EDITOR.

### Dahlias in Tennessee.

We have sold some Iris and other plants to florists and had thought of raising more next Summer. Would Dahlias be likely to sell well? Can they be sprouted in a cold frame? I have no hothouse. Will they need a support when growing for tubers? Can the tubers be cut up and planted without sprouting them? I would like advice on Dahlias, Cannas and tuberoses.

W. H. B.

Greenville, Tenn.

*Answer*:—While large growers North make money out of Dahlias, I am not sure that your section is the most favorable one for them, especially as you would have to sell to the trade, and the trade can get supplies nearer at home. The tubers can be sprouted in cold frames, and in your section will be all the better for not planting too early. Here I take them up when the weather has become mild, for I bury them outside in heaps like sweet potatoes and then usually find that they are already sprouted and ready to divide. But if not, I simply let them lie in the sun till the eyes start, for it is hard to say before sprouting where the eyes are. Merely for growing the tubers it is not necessary to stake them, if planted four feet apart each way. But for looks and bloom they should be staked. The large growers of tuberoses in the moist, sandy soil of Eastern North Carolina pretty well supply all the demand there is for these, and they also supply Cannas and Caladiums largely. I have found the Candidum lily one of the best plants to grow for profit. I sold mine too closely and sent an order to north of France for planting bulbs, which was accepted. But the war swept over that section and I did not get them. Now all are imported from south of France, and these are not so fine as the northern ones—that is, do not make good flowers. These should be planted in September to make their Winter growth. We can make as fine bulbs as the French. Then, here, where I am but a few hours from Philadelphia and New York, I found the cut flowers as profitable as the bulbs, and when I can stock up again I shall depend mainly on the blooms till I get a large stock of bulbs. The various species of Iris should pay very well with you. On low, moist land the Japanese Iris does finely and is in demand.—W. F. MASSEY in *Rural New Yorker*.

### Time of Moon for Planting Gladioli.

TO THE EDITOR:—

What time of the moon for best increase of corms and cormels, should be observed in planting Gladioli?

W. D. P.

*Answer*:—While we sympathize with the old-fashioned ideas of people who think that the moon may have some influence on the growth of vegetation on the earth, yet we cannot find any real evidence that there is any virtue in paying attention to the time of moon in planting various crops. The experiments stations will not admit that the moon has any influence on the

growing of crops. We believe that there is less and less attention paid to the phase of the moon in the planting of crops, and nowadays it is more a question of getting the work done than it is to pick out any particular time for doing it.

### The Glad Philosopher's Musings.

In nearly every community there abides some noble woman who loves flowers and grows them in her garden, and from her goodly store generously supplies the pulpit of her church during the summer season. Often this good sister does not have the means to buy all the plants and bulbs and seeds she would like, and here is a hint to those who have a surplus—divide with the faithful "flower-lady," and then go around to the church yourself on Sunday mornings, and I'll wager that you'll enjoy the service more than you ever did before.

The Glad Philosopher is fortunately identified with a church which has just such a generous woman who loves to garden and to give her flowers away. Having no children and few cares, she took up gardening as a pastime and found that it gave her robust health as well as much pleasure. Her garden furnishes flowers liberally for the church every Sunday without interruption from early spring until late autumn, and when the writer makes up his order for Darwin Tulips, Gladioli, etc., he occasionally adds an extra fifty or hundred for the faithful sister's garden and the resultant church bouquet.

The Gladiolus is pre-eminently adapted for use as a cut flower, and more valuable as such than for garden decoration, as sometimes grown, and so it is not out of place in the vegetable garden, growing in stately rows in close company with the beets and beans and cabbages. In fact, I would encourage this location in preference to one where decorative effect might be required.

The writer has in mind at least one instance where an injudicious use of the Gladiolus resulted in its being entirely discarded by a person who bought corms by the thousand and had them

planted in a single row along the entire front of a large field bordering the roadway in front of his country place, where shrubbery would have been more fitting. As the bulbs were planted in succession, the result was anything but satisfactory and the doom of the Gladiolus was at once sealed. Had he planted the bulbs in his garden, and cut the blooms for house and porch decoration he would still love the Gladiolus, even as you and I.

Don't misuse the Gladiolus. It is the cut flower par excellence, but it cannot take the place of the spirea, the barberry or the deutzia.

The Glad Philosopher is an office man and only raises flowers as a diversion—a healthful recreation—and for the love of them. His desk is never without its vase of beautiful flowers from the first jonquils of spring to the last asters of autumn. Darwin Tulips, German, Spanish and Japanese Irises, Peonies, Roses, Gladioli, etc., all take their turn in the vase on the top of the desk, and each kind seems to be trying to outvie the others in charm and loveliness. Do you ask me which flower in the season's procession gives me the most enjoyment? I'll tell you. It's the one that is before me—now.

THE GLAD PHILOSOPHER.

### Vegetables vs. Flowers in War Time.

[Continued from page 71.]

Try interplanting rows of flowers with vegetables. You will be surprised to note how well they harmonize and thrive. Few ferns furnish a finer background for flowers than the delicate, lacy leaves of the carrot, and such flowers as Sweet Peas and Gladioli actually seem to give better results when planted in the vegetable garden. When early peas are out of the way that space may be utilized to plant Gladioli, Baby Breath, Nasturtiums and other plants that will bloom at a late planting. If you plant flowers in borders or beds, the various varieties of lettuce may be used effectively as edging plants. Enclose your combination garden with a hedge of Dahlias, give it a reasonable amount of care and in due season you will have a garden that I know from experience will prove most useful, convenient and peculiarly suited to these unusual times. Such a garden is a "time saver" in many ways. It is so suggestive and easy while getting vegetables to gather, at the same time, flowers for table or house decoration, that even the busiest housewife can always spare a few moments to adorn the home with flowers.

As the production of food is of the highest importance raise all the vegetables that you can but do not sacrifice your flower garden for

A garden is a lovesome thing God wrot  
Rose plot  
Fringed pool  
Ferned grot  
The veriest school  
Of peace; and yet the fool  
Contents that God is not.  
Not God in gardens when the eve is cool?  
Nay, but I have a sign  
'Tis very sure God walks in mine.

## A Peep at Glads Under the Ground.

(From Catalogue of J. D. Long, Boulder, Colo.)

THERE'S A SAYING, you know, "You can't eat the cake and keep it too." Whoever started that didn't know much about Glads. Glad bulbs will not only give your money's worth in lovely, lasting, cut flowers but in the fall they cheerfully hand you back all your bulbs and then some.

Every healthy Glad bulb produces a new one, (formed just above the old, which dies and shrivels up). Some will form two, three or four new bulbs. Then for good measure many will often throw in some of the tiny bulblets, maybe several, may be a dozen or more. These bulblets should be saved and planted like peas the next spring. They

variety that multiplies very fast from bulblets.

No. 3 is another *King* bulb, but grown from an old bulb of larger size. Notice the old bulb at the bottom.

No. 4 and No. 5 illustrate how one bulb makes two and three new ones, formed on top of the old. These bulbs are flatter and not so strong for another year as No. 1, 2 or 6.

No. 6 is a bulb cleaned for selling and planting. The old bulb has been removed and stem cut off close to the bulb as indicated by the mark just above bulb. Notice this bulb is thick up and down. The thicker



make the best vigorous blooming bulbs in one to two years.

Now look at these bulbs as they appeared when I pulled them out of the ground last fall. No. 1 is *Pendleton*, grown from a bulblet. It is not a large bulb but is thick from top to bottom (indication of strong vitality) and will send up a good flower spike next year. Look closely and you will see that it has a clump of bulblets also. There is no rule for figuring on bulblets, but generally the younger the bulb the more bulblets it will make.

No. 2 is a two-year old, grown from a very small "yearling" bulb, so small that the old bulb does not show. It has lots of bulblets also. This is *Mrs. Francis King*, a

the bulb, the stronger; the flatter it is, the weaker. These are general rules only. Some varieties just naturally make thicker bulbs than others at any age. *Princeps*, for instance, makes very thick or conical bulbs, while *Augusta* and some others run more flat.

When once you get the "Glad fever" you can hardly wait until digging time to see what has been going on under the ground while you have been enjoying the flowers above. There are always surprises in store for you. One thing you can bank on, though, and that is your original investment and a mighty good accumulation of interest in the way of additional bulbs and bulblets. All this in addition to the flowers. Who said, "You can't eat the cake and keep it too?"

with excellent results. For the brown seaweeds it has been found needful to add a little permanganate of potash to secure the best effect. With the red seaweeds certain stains are used but, when once the right color is secured, the copper acetate fixes it for all time. One great value of this plan is that the plants so treated do not suffer from exposure to light. After some months of standing in direct sunlight the treated specimens were as bright green as if they had just been freshly gathered.--*Scientific American*.

### American Gladiolus Society.

### Preserving the Natural Green of Plants.

A discovery of very great interest to botanists and others, has recently been made. As is well known when plants have been dried by any of the well known processes (such as under pressure, in hot sand, or by sulfur fumes) the foliage loses most of its natural greenness. To get anything resembling a life-like effect, the leaves have had to be artificially colored and this plan has not proved to be very satisfactory. The difficulty has been entirely surmounted owing to the fact that it has been found possible to form a chemical compound with the chlorophyll which is permanent. The method adopted is on the following lines. A boiling solution of copper acetate and acetic acid is prepared. Into this the parts of the plants to be preserved are steeped. The acetate combines with the chlorophyll and forms a permanent coloring matter. Whatever the original shade of green may be this color is perfectly fixed. The drying process can then be carried forward. Where the particular method is that which preserves the form, as is the case when hot sand is used, the preserved plant is wonderfully life-like. The steeping in the copper acetate appears to have no effect on the flowers. If the drying is carried out with sand or sulfur fumes the original hues are usually well preserved.

The plan described above has also been employed in the preservation of seaweeds

The prize list of the American Gladiolus Society which appears on page 72 is a very attractive one and it should bring out a large display of bloom. The time of the show is such that Gladioli should be at their height. Buffalo is a well located city for a Gladiolus show. Eastern growers can, any of them, easily reach Buffalo; likewise any of the Western growers as far as the Mississippi River or even in Minnesota or Iowa can show to advantage and with assurance that their stock will show up well when staged in Buffalo. We urge that all who are interested in Gladioli should make an effort to display bloom at the Buffalo show.

### CLASSIFIED ADVERTISING.

Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.

W. E. KIRCHHOFF CO., Pembroke, N.Y., growers of the finest Gladioli, such as Pendleton, Panama, Niagara, Pink Perfection, Europa, Mrs. Fryer, War, Peace, etc. Correspondence solicited.

MUNSELL & HARVEY, Ashtabula, Ohio, growers of GLADIOLI and PEONIES. Would appreciate your order for Peony roots for fall delivery, at least the request for a price list.

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Our *Iris* list contains only those varieties that have artistic blending of delicate shades. They may well be called the "Poor Man's Orchid."

Our *Peony* list contains only those varieties that have proven popular and warrant planting in every garden.

Both these flowers are very hardy and need no winter protection, unless it be in very exposed locations. Send for list and make your choice. We will send cultural directions and PREPAY expressage on all orders received before AUG. 1.

ORCHADOTTE FARMS

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Winner at New York and Boston '17.  
\$2.00 per doz., postpaid.  
Have you received my distinctive booklet of unusual gladioli?  
H. E. MEADER, Gladiolus Specialist, Dover, N. H.

### FOR SALE—1st Size Bulbs

Mrs. Frank	Ea.	Doz.	Giant White	Ea.	Doz.
Pendleton, Jr.	\$.15	\$1.25	America	\$.05	\$.50
Butterfly	.25	2.50	Orange Gl'y	.50	5.00
Cherry King	.10	1.00			
Pride of Goshen	.15	1.50			

Postage Prepaid.

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We are offering Planting Sizes and Bulblets of several desirable varieties. We specialize in the choice American and French varieties. Catalogue on request.  
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GLADIOLI  
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Catalogue, printed in English, on application.

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of the best varieties and mixtures. My bulbs are all planted for this season and doing well but I shall be pleased to talk with you about "Glads." for next fall or spring, either wholesale or retail.

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Also IRISES and NARCISSI. Send for price-list.

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#### A HORTICULTURAL DIGEST

Published monthly. Subscription, \$1.50 a year. 286 Fifth Ave., New York, N. Y.

## FRYER'S NEW IRIS

PEOPLE have often said to me, "What is the use of raising seedlings for there are altogether too many varieties now?" I am well aware that too many poor varieties have been named, and if nine-tenths of them had never been named it would be much better for those interested in Iris. I am well pleased with my success with those which have bloomed, and as I have hundreds of seedlings to bloom this season for the first time to say nothing of the 10,000 German Iris seed which I planted last September, and should get some wonderful varieties from all of this number.

Mr. Wm. A. Peterson, of Chicago, who is one of the best Peony and Iris specialists in the U. S., purchased a few of my varieties in the fall of 1916 bought 25 Rev. Wurtelle, and all of the W. J. Fryer and Gov. Hughes which I could spare. Mr. A. E. Kunder of, Goshen, Ind., came 500 miles last June to see them when in bloom, and bought a single root of Fryer's Glory at \$5.00. Mr. A. M. Brand, of Faribault, Minn., did the same.

The Wing Seed Co., of Mechanicsburg, Ohio, bought 25 Clarence Wedge, and wished others which I could not supply.

Many others have bought them, and speak very highly of their worth. I believe it is one of the best recommends to have specialists buy them after seeing them in bloom. I will have a fair supply of many varieties next fall, and shall reduce the price accordingly. If interested, write **WILLIS E. FRYER, - - - Mantorville, Minn.**

## "THANKS"

WE ARE receiving many kind words from our customers and friends as usual and have endeavored to so conduct our business that we may deserve these compliments and retain all our old customers, when they are in need of bulbs in the future.

"A pleased customer is our best advertisement."

If any of our dealings are not satisfactory kindly let us know.

Wholesale or Retail Catalogue mailed on request.

### G. D. BLACK

Albert Lea,

Minnesota



# THE FLOWER GROWER

FORMERLY

Volume V  
Number 8

## THE MODERN GLADIOLUS GROWER

August  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

Entered as second-class matter March 31, 1914, at post office at  
Calcium, N. Y., under act of March 3, 1879.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

Subscription price: Three years, \$2.00; One year, \$1.00.

## Flowers—An Appreciation.

BY ALFRED C. HOTTES.

(In *Humanitarian Monthly*.)

**T**HE FLOWER is the growing masterpiece. Great painters have created for us color symphonies or inspired thought pictures.

From the same paint is made the airy landscapes of Corot, the elegance of Velasquez, the crude beauty of Millet, the infinite detail of Botticelli, the warm coloring of Rubens, and even the impressionistic contrasts of our modern cubists. In the plant such master strokes have been made repeatedly. The lover of the flower may see in it all the qualities of the man-made canvas. He finds exquisite daintiness, incomparable complexity, fantastic arrangement, unwonted simplicity, sumptuous coloration, and the greatest diversity of form.

He finds a character study. The Pansy is a wit; the Poppy, a dancing girl; the Water Lily, a nymph; the Orchid, a bird; the Rose, a queen; the Snowdrop, a white fairy; all Daisies are fortune-tellers; and Jack-in-the-Pulpits, preachers; the Pitcher plant is a vampire; the Indian pipes are paupers, pale and living on charity; and the gaudy-colored Monkey flower is a montebank.

Flowers are even actors—there are comedians, heroes, blushing ingenuos, and bold, coarse villains; still others in their positions of opulence and dignity are spectators. And the play is called Flora.

The flowers are the natural jewels of the world; they are the more valuable because their charm is so fleeting. They are gems to be studied, for each one is different. Mineral jewels have rarity, but their charms are paltry.

Flowers are the accompaniments of civilization, not luxuries. They grace the nuptial, they cheer the unfortunate, bedeck beauty and furnish, when properly used, a benediction to the human life.

Unfortunately we do not all have our own greenhouses, and in the winter we must adopt the flowers grown for us. Still more to be regretted is the

fact that for many persons the summer garden is impossible. But most cities have them and unconsciously we trend toward the green grass and the fragrant flower valleys. Botanical gardens, public parks and private estates are becoming more and more appreciated. Lilac Sunday is now a definite holiday in many cities.

You know the names of your friends, of course. Because you know their names, their faces, their joys and their life, they are infinitely more interesting to you than the general mass of men. So with the flowers, know their names, their faces, their joys and their life. Finally you will be glad to know their relatives, then your scope of acquaintance will have been broadened. Some of the flowers' poor relatives are most interesting, even if they are not beautiful. This will lead to a study of the botanical relationship; then every flower will be worthy of note. Some plants may then be attractive whether they produce bloom or do not.

Bacon says, "Men come to build stately sooner than to garden finely; as if gardening were the greater perfection." So the most beautiful gardens are always those in the mind. It matters not how unsuccessful your flowers are, the garden you meant it to be is still in your mind and it will have an interest for you. The garden of your neighbor will never have that charm.

Flowers are to be appreciated to the same degree that is beautiful music, true painting, towering mountains, exalted literature, inspired sculpture, stirring poetry, and noble landscapes. Happy humanity results from broad sympathies. Do we not agree with Emerson that "Wherever snow falls,



GLADIOLUS—SUMMER BEAUTY.

Originated by A. E. Kunderd and described by him as a very choice, deep salmon pink of distinct shade. It is tall and showy and one of the most dependable sorts as a cut flower, throwing a strong flower spike from rather small corms and with many open blooms at a time.

[ Concluded on page 88. ]

## "Gladiolus Studies III. Varieties of the Garden Gladiolus."

BY ALFRED C. HOTTES.

Reviewed by S. E. SPENCER.

[Written expressly for *The Flower Grower*.]

AN EXAMINATION of the catalogs issued by growers of Gladioli will show at once a great diversity of ideas in regard to colors, markings, sizes, and values. One variety, *Independence*, has been variously described as light scarlet, light red, rose pink, deep rosy pink and deep rose pink bordering on scarlet. Medium and small varieties are often described as having "large" blooms. Sometimes the same variety is offered under several names, or the same name may be used for two or more varieties. It has also frequently happened that inexperienced or careless growers have put on the market new seedlings described as choice and very desirable when in reality they were decidedly inferior.

In an earnest endeavor to remedy some of these evils and to establish a uniform standard of colors, sizes and markings the American Gladiolus Society as soon as it was organized, elected a committee on nomenclature whose duty it should be to settle disputes in regard to names, establish uniformity in descriptions and pass upon and register the names of desirable new seedlings.

Arthur Cowee, Prof. L. B. Judson of Cornell University, and Leonard Joerg, were the first members of this committee, and an arrangement was made with the Department of Floriculture of Cornell University for the use of land for the official trial grounds.

The committee announced in the A. G. S. Bulletin No. 2 (1911) that they were ready to receive bulbs from all growers for testing as to proper names, and for the naming and registration of new varieties.

More than 70 growers responded by sending to the trial grounds about 600 varieties, and Bulletin III published December, 1916, is the official report issued by the University in co-operation with the Nomenclature committee.

This work has been done in a very thorough and systematic manner and the descriptions will serve as a standard for all who issue catalogs and other advertising matter.

The color chart *Repertoire de Couleurs* authorized by the American Gladiolus Society was used at the trial grounds, and it is evident that we must learn a new list of names of shades and colors. The familiar ones such as crimson, purple, rose pink, red, etc., are not adapted to the great range of colorings found in modern Gladioli. This chart contains 365 color plates with four variations of each color.

The name of the originator is given if possible, the average size of blooms in centimeters, and synonyms, if any are known to be in use. A sample paragraph will serve as an illustration of the system adopted:

MRS. FRANCIS KING.

Originator, Coblenz. Group, Nancevanus. Childsii. Stock from Teas, Tracy.

*Bloom*—Large, (12 cen.) tube straight, medium slender, medium long. Segments unequal, connivent; the upper horizontal with edges slightly incurved, the lower almost straight and narrower. Stamen filaments white with red bases; anthers nearly white with blue suture lines. Perianth vermilion red (87-II) sparsely splashed with deeper vermilion red (87-III) and often penciled to form a blotch on two lower segments of vermilion red. Bloom well open and the standard of substance. Shape excellent and color clear. Six blooms open at one time.

*Season*—Midseason; 80 days.  
*Spike*—Tall, (120 cen.) erect, a fair number of blooms (18) branched. Three spikes often per corm.

*Habit*—Erect, tall, spreading.  
*Growth*—Vigorous, well furnished with medium broad leaves.

*Corms*—Large; cormels prolific, large. A list of synonyms noted by the author will be of interest:

Alice Cary, syn. Snowcrest.  
Baltimore, syn. Salmon Queen.  
Baron Jos. Hulot, syn. Blue Jay (Childs.)  
El Capitan, syn. Tallest Yellow.  
Evaline, syn. Smoky Violet, John Schmelzer.  
Faerie, syn. Cream Pink.  
Fairy, syn. Mrs. Jas. Lancashire, Fairy Queen.  
Gaiety, syn. Pigeon, Bird of Paradise.  
George Paul, syn. Faust, Harvard.  
Hiawatha, syn. Aurora.  
Hollandia, syn. Mikado, Alice Roosevelt.  
Klondyke, syn. Golden Queen, Golden Nugget.  
La Marck, syn. DeCheville.  
Madam Butterfly, syn. Yellow Jacket.  
Madam Lemoine, syn. Easter.  
Mary Fennell, syn. Charlotte, Giant Lavender.  
Minnesota, syn. Sterling.  
Mrs. W. E. Fryer, syn. Red Cana.  
Princess of Orange, syn. Kunderds Orange.  
Reine de L'Anjou, syn. Reine Blanche, Le Radium, Jeanne d'Arc. White Excelsior.  
Rochester White, syn. White Queen.  
Rosella, syn. Kathryn.  
Scarsdale, syn. Cedar Acres Mauve.  
Snowbank, syn. Princess Sandersoni.  
Taconic, syn. Perfection, Gertrude.  
Velvet King, syn. Coblenz 312, Emma, Grenadier, Sidney Grant, Wm. Mason.  
White Lady, syn. Weisse Dame.

The author's explanation of the cause of this duplication of names is worth quoting:

"Groff, Coblenz, Kunderd and many others in the early years of their work produced an excellent lot of seedlings which have been disseminated unnamed about the whole country. Other growers have recognized enough merits in them to justify naming. The result has been that two or more growers have named the same seedlings. In

many cases growers have mixed these miscellaneous bulbs with their own seedlings and felt that they originated them."

Mr. Cowee has registered a variety under the name of *Faust* which is not the same as *George Paul*, and his *Blue Jay* is entirely distinct from *Baron Jos. Hulot*.

Pages 448-451 inclusive contain a list of varieties registered but not yet described, a list of large flowered kinds, 11 centimeters and over; tall varieties, 105 centimeters or more, and a list of seventy-five recommended as good commercial exhibition varieties.

### The American Gladiolus Society.

Additional prizes offered since the Preliminary Schedule was printed in the July issue of THE FLOWER GROWER.

OPEN TO ALL.

A. E. Kunderd, Goshen, Ind.,

Offers in each of the following classes bulbs to the value of the prizes set forth for each class:

	1st	2nd	
No. 26—\$5.00	\$3.00	—	Best 6 spikes <i>Purple Glory</i> .
No. 27— 5.00	3.00	—	Best 6 spikes <i>Myrtle</i> .
No. 28— 5.00	3.00	—	Best 6 spikes <i>Mrs. Frank Pendleton</i> .
No. 29— 5.00	3.00	—	Best 6 spikes <i>Summer Beauty</i> .
No. 30— 5.00	3.00	—	Best 6 spikes <i>Mary Pickford</i> .
No. 31— 5.00	3.00	—	Best 6 spikes <i>Pride of Lancaster</i> .
No. 32— 5.00	3.00	—	Best 6 spikes <i>Orange Glory</i> .
No. 33— 5.00	3.00	—	Best 6 spikes <i>Arizona Rose</i> .
No. 34— 5.00	3.00	—	Best 6 spikes <i>Sweet Orra</i> .
No. 35— 5.00	3.00	—	Best 6 spikes <i>Butterfly</i> .
No. 36—Best display of Kunderd varieties not less than 15 spikes nor more than 25 spikes, First prize \$10.00; second prize \$6.00; third prize \$4.00. All prizes to be paid in stock.			

FOR NON-COMMERCIAL GROWERS.

Garden Magazine, Garden City, N.Y.

No. 88—The Garden Magazine Achievement Medal for the finest quality of bloom shown in Classes 51 to 100, exhibitors showing less than 25 spikes not to be considered.

A. E. Kunderd, Goshen, Ind.

Offers in each of the following classes bulbs to value of the prizes set forth for each class:

	1st	2nd	
No. 89—\$3.00	\$2.00	—	Best 3 spikes <i>Myrtle</i> .
No. 90— 3.00	2.00	—	Best 3 spikes <i>Purple Glory</i> .
No. 91— 3.00	2.00	—	Best 3 spikes <i>Mrs. F. Pendleton</i> .
No. 92— 3.00	2.00	—	Best 3 spikes <i>Alice Tiplady</i> .
No. 93— 3.00	2.00	—	Best 3 spikes <i>Lilywhite</i> .
No. 94— 3.00	2.00	—	Best 3 spikes <i>Kunderd's Glory</i> .
No. 95— 3.00	2.00	—	Best 3 spikes <i>Pride of Goshen</i> .
No. 96— 3.00	2.00	—	Best 3 spikes <i>Mrs. A. E. Kunderd</i> .
No. 97— 3.00	2.00	—	Best 3 spikes <i>Rose Glory</i> .
No. 98— 3.00	2.00	—	Best 3 spikes <i>Youell's Favorite</i> .
No. 99—Best display of Kunderd's varieties not less than 10 spikes nor more than 15 spikes. First prize \$6.00. Second prize \$4.00. Third prize \$2.00. All prizes to be paid in stock.			

A correspondent writes us that his experience leads him to believe that varieties of the Gladiolus that produce cormels sparingly retain their vigor longest if not indefinitely, and that conversely, those kinds that are prolific producers of cormels tend to lose their vigor more rapidly. Our own deductions are along similar lines and we would be glad to have the experience of others.

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

## New Traits.

SINCE the advent of *Gladiolus America*, the *Seedling* bee has buzzed almost continuously in the bonnets of *Gladiolus* growers, with the result that thousands of new varieties have been grown, and hundreds have been named and placed on the market, but few have surpassed in beauty or created the sensation that *America* did. It raised the standard, and every new variety worth naming must equal it in size and beauty or possess some unusual trait so distinctive that it will at once attract the attention of the casual observer. As we look at the wonderful varieties now in existence we wonder how it will be possible to produce anything better than we already have, but nature is full of surprises and at times brings forth entirely new forms and colors or perhaps slight variations which are only tendencies, but as straws show which way the wind blows, so may the discerning eye note the tendency and the possibility of its guidance.

It seems to me that in my feeble efforts in the improvement of the *Gladiolus* that nature has "lent a hand" in a most surprising manner, and a few of the traits that have come to my attention may be of interest to others.

I had grown *Gladioli* from seed—a few each season—for a long time and with very good results, when, one summer some over ten years ago I noticed among my seedlings one of large size and good substance, and growing near it was a much taller one with blooms of a different color. As I looked I thought how fine it would be if the large blooms were on the tall spike and not anticipating any marvelous results I pulled off an anther and rubbed the pollen on the stigmas of two or three of the large flowers, saved and grew the seed and among those seedlings was one which, literally, shot into the air. Improved form, color, and spike. Nature

had given me the *Gladiolus* which I named *Evelyn Kirtland* and which I believe is one of the tallest, if not the tallest in existence. It is plain to be seen that Nature is constant in ef-



forts for advancement and not content with giving this wonderful flower she hints at something still greater and more unusual by occasionally dividing the blooming spike and many times has this variety appeared in our fields showing a double spike with four flowers all facing one way. A photo of one of

these unusual forms recently appeared in *THE FLOWER GROWER*, but we have had some that were divided in such a way as to show the four flowers. The trait is there and the one who is able to permanently establish it will be indeed fortunate, but it is as elusive as a will-o-the-wisp, for bulbs which have given a divided spike one season produce ordinary ones the next.

Another variety is of interest. The spike is tall and straight, flower wide open, color pale flesh with cerise marking in throat. Its variation is of an entirely different character. The spike, while tall, is usually slightly waved, and the flowers—all of them on the spike—come in a beautiful silky crinkled or crepe like form with few throat markings. There are many flowers open at one time and substance is good. Sometimes 50% come in the form of the variation, and it took two seasons of careful watching and selecting to convince me that bulbs were producing smooth petaled flowers one season and crinkled ones the next or vice versa. This was named *White Crepe* but being liable to produce blooms different from the description we are not listing it and it has gone into mixture. Perhaps some one will establish the type and there will be another on the market. The variation does not produce seed.

Walking along beside the row of seedlings one day I saw a "new one" that attracted my attention. The foliage, which was a very light green, was of drooping form and away from the spike which could be cut nearly to the ground without interfering or cutting the leaves. The flowers were of white with blue markings in the throat and an entire absence of red markings. It presented a beautiful porcelain effect, but where did the blue throat markings come from for at that time we had never had a blue or purple variety in our field and it was grown from seed saved by myself? Have used it many times in an effort to secure a better blue, and last season was rewarded by finding one of its seedlings to be a much taller spike, larger and more desirable form of flower of purest glistening white with clear cut deep blue (not purple) throat. Entirely different from any other blue marked *Gladioli*. From seed saved from a well grown *Gladiolus May*, came a much ruffled seedling very similar to Mr. Kunderd's beautiful originations. No ruffled varieties had been grown in our fields

previously and the *Gladiolus May* from which the ruffled seedling came, was grown from stock that had been in our possession for a number of years. This ruffled one produced good seed, a large per cent of which came ruffled and the bulblets produced the same as the parent bulb.

What grower has not, at some time, had a variegated foliage variety appear among his seedlings. We have one from which a portion of the bulblets always produce the variegated form, but it is slow to increase and produces no seed.



The two spikes in the center are the variety, *Evelyn Kirtland*. The one on the left and the taller one on the right are the parents of this variety. It will be noted that *Evelyn Kirtland* is taller than either of its parents.

A tall seedling which appeared among ours has a form sometimes similar to the *Iris of France*, (no *German Iris* in my garden) having the standards and falls.

I feel sure that sometime, somewhere, under the right environment, that these traits and many others impossible at present to even imagine will become established, for those fleeting glimpses are true promises of beauties yet in store for us.

MRS. A. H. AUSTIN.

Sketch of Divided Flower Spike of *Gladiolus Evelyn Kirtland*. The division of the spike is shown just above the open flowers.

## The Flower Grower

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Vol. V

August, 1918

No. 8

"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### Changing German Names of Flowers.

"WHAT'S IN A NAME?"

The *New York Sun* in a recent article prints some resolutions adopted by the Park Garden Club of Flushing, L. I., which in substance proposes to change the names of all roses and other flowers bearing names of Teutonic origin to the names of people who are prominent in the work of the allied nations.

While the motive which prompts such a suggestion is correct and commendable we doubt very much if the actual changing of names, which have been honored by the passing of time, is wise or reasonable. It is probable that many of the German names are after people who originated the flowers or who were prominent in floral work. In such cases they are entitled to due credit for their activity and accomplishments in their chosen line. Where the names are simply Teutonic without being the names of individuals there can be no serious objection to making changes, but we do think that where the name indicates the origin of the flower, that the names should remain as they are. We believe in "giving the devil his due" and if persons of Teutonic origin have done good and original work in horticulture that there can be no objection to retaining their names as attached to flowers which they may have originated or patronized.

There are many thousands of true American citizens who have Teutonic names and surely these patriotic Americans may be displeased to have names of German origin taken from favorite flowers, and these true Americans are entitled if possible to even greater respect and consideration than those of allied or American ancestry.

In passing we may remark that to show one's patriotism it is not necessary to go to the extreme indicated by the resolutions adopted by the Park Garden Club. The editor feels as strongly about the war situation as anyone can, has one son actually in the service and another ready to go when he is 18 years of age, and is willing to go himself if men upwards of fifty are needed. This is said to explain that the above opinion is not based on personal grounds, but on purely common sense grounds. It really seems childish to change time-honored names although they may

be distasteful just at this time, and we venture the opinion that those who take such an extreme position at this time will after the war is over and a few years have passed, be surprised at their own lack of perspicuity. There is no doubt but what the war will end soon and the way it will end has never been in doubt in our mind nor in the mind of any true American, since the very start. Let us look forward and be liberal in our views.

MADISON COOPER.

### Benefits of Flower Shows.

Flower shows are becoming more popular from year to year, and even under war conditions there has been a great interest manifested by the various floral organizations throughout the country. Many people believe as do we, that war time is no time to neglect flowers and that flowers should be given special attention now.

Flower shows serve to bring together those interested in many different kinds of plants and flowers and the very best flowers in each class. Flower shows are often specialized and given up to one particular flower. Such, for instance, as the American Dahlia Society's show and the American Gladiolus Society's show. Comparison of the best flowers of the best varieties on the show bench brings out the defects that exist as well as the good qualities and thus improvements are made possible. Many growers think that they have the best and honestly believe that their product is superior to others, but when their specialties are placed alongside the product of other growers they may prove inferior in some respects or their superior qualities made manifest. Flower growers should always seize every opportunity of visiting flower shows and showing their own product alongside the product of other growers. Some surprises are bound to be in store for them. It is hardly possible that they have a true gauge of the value of their own product.

Flower shows have still another beneficial and valuable result which is even more important and that is the education of the public in the use of flowers and the creating of a desire to possess the beautiful flowers seen at the show. When many people view a floral exhibit a large percentage of them will become interested to a greater or less extent. The educational value of a flower show is immense from many different standpoints and flower lovers should do all they can to promote and keep up interest in flower shows even during war time.

### Correct Selling Prices for Flowers.

The price of almost every commodity has advanced so greatly and the price of labor has increased so much that the question of prices for flowers is an important one and worthy of careful attention. Some flower growers seem to think that if the price is advanced it will reduce the use of flowers, while others maintain that unless the price is advanced the floral business will become unprofitable and cease to exist. There is no reason why prices of flowers should not be advanced in keeping with the general tendency toward higher price levels in all lines and we can see no reason for attempting to keep down the price of flowers under present conditions. Prices are bound to be higher and a modest advance in proportion to actual cost of production is no more than right. The flower grower who can get cost or a little better during war time should be satisfied, but if he sells at old prices he is not getting the cost based on present market value of labor and materials.

## Late Blooming Gladioli which Received a First Class Certificate in Holland.

ONE OF OUR advertisers, K. Velthuys, of Holland, sends us an article from *Bloembollencultuur*, a trade paper especially for the bulb trade in Holland, and we are pleased to reprint this entire, as giving the opinion of the Holland growers or at least the opinion of whoever wrote the article, on not only a few of our American varieties but a number of the Holland varieties, a part of which are well known in this country and some of which are very little known here. The translation, while not in classical English, yet is plain enough to read and we have not attempted to do much with changing it for this reason.

Since the institution of our floral committee, no less than 19 late flowering Gladioli (among which were two *Primulinus Hybrids*) got a first class certificate, and it seems to us interesting enough, to see which of these excellent flowers kept also high worth for the cultivation. The varieties are:

*Europa* (1911), *Glory of Noordwijk* (1912), *Panama* (1912), *Red Emperor* (1912), *Sieger* (1912), *Badenia* (1913), *Electra* (1913), *Liebesfeuer* (1913), *Pink Perfection* (1913), *Prince of Wales* (1913), *Loveliness* (1914), *Madam Monnet Sully* (1914), *White Giant* (1914), *Flora* (1916), *Majestic* (1916), *Mrs. Velthuys* (1917), *Mrs. Frank Pendleton* (1917), *Primulinus Jane* (1914), *Scarletta* (1917).

Among these are three of no worth for us, because they are not grown here any more in quantities; they are *Sieger*, *Badenia*, *Mad. Monnet Sully*. The latter, a very fine creamy white Gladiolus with orange scarlet spot, has been imported from the foreign countries and will be certainly found there in large quantities. It is to be grown here, but gives only few corms. *Sieger* and *Badenia* are difficult to grow here, which is a pity, especially for *Badenia*, the color being so distinct.

*Europa* is surely one of the best white Gladioli, though it is hard to grow. In sandy soil it does not grow very well, but a little better in heavy soil, especially in clay.

*Glory of Noordwijk* has startled the whole Gladiolus world in its time. The finely formed blooms of a soft yellow tint drew everybody's attention wherever it was shown and now we fear that *Glory of Noordwijk* will follow *Sieger* and *Badenia* within a few years. This would be a great pity as *Glory of Noordwijk* is a Holland-grown bulb which we should like to spread all over the world.

*Red Emperor* has also known better times. We remember very well how a handful of these fine flowers were brought by auto car to the flower show and how enthusiastic people were when they saw them. They were beautiful, indeed; large *Amaryllis*-like, bright red blooms on long, strong stems, better and finer they could not be. In cultivation, *Red Emperor* seemed less good and it therefore is to be arranged among those varieties, which will never be principal sorts.

*Electra* is better. It can be grown here with success, and though the color is not so deep and the flower not so large and round, yet it remains a beautiful Gladiolus and will always be highly valued by all growers.

*Liebesfeuer* is one of the best we know, and it is worthy of being grown. It has all advantages, the color is of the finest bright red, many blooms open at the time, while the stem answers to all expectations. We are sure that *Liebesfeuer* will always be one of the best sorts for the trade, for besides being an excellent cut flower, this variety is of high value for arranging groups, as the stems are strong and not too high and the color beautiful.

*Panama* and *Pink Perfection* are two pink Gladioli which are well known. Both are to be cultivated here pretty easily. *Pink Perfection* is of a distinct very fine pink color. We surely have here two leading varieties, which, both as cut and garden flowers, possess the most favorable qualities.

*Prince of Wales* is not to be surpassed, both for its color as for cut and garden flower. The soft, fine salmon pink color gives this variety a singular charm. Among all sorts, which were awarded a certificate, it is standing alone. There are many white, red, yellow and pink ones, but there is only one in salmon and that is *Prince of Wales*. Also this will have a future and because it is cultivating very well and it will always play an important part in our cultivation.

*Loveliness*? Does not it stand quite apart among the first class Gladioli as for its color? And also *Loveliness* will remain with us. The peculiar creamy white tint draws the attention, while the very large blooms and strong spikes, answer to high expectation. The cultivation is easy which is one more proof of its remaining a standard sort.

*White Giant*—Speaking of a giant, we think of something big, heavy and stiff. But this cannot be said of this sort. Large, very large are the blooms indeed, but heavy and stiff they are by no means. On the contrary, the form of the separate blooms is such that the whole has something that looks elegant, for many of the gigantic white blooms are open at one time and it remains always attractive. The color is pure white and sometimes in admiring this variety a long time, we wished a small creamy flake on the lower petals so that the flowers became more alive. Another time, however, and we think of the Nymegen-exhibition, we were surprised at the splendid effect it made by its snow-white color on green background. This is sure—*White Giant* is the best white at present.

*Flora* is an improved *Glory of Noordwijk* as to its color. We do not know its worth for cultivation, but what we saw about them as cut flower was excellent. The color is soft and yet bright, while the blooms and spikes were very good. When *Flora* also possesses the wished properties for cultivation, we do not doubt but in the future it will be one of the most wanted varieties.

*Majestic* is certainly the most brilliant red Gladiolus among the elected ones. On the field in the bright sunshine the color is dazzling, and already from afar it is drawing the attention. From this we may conclude that it will be of high value for a garden decoration. It can also be used for cut flower with good success. We only fear that flowers will become too much striped by bad weather as many Gladioli do. Regarding its worth for cultivation, we cannot judge but, as we heard, it is growing well, and if this may be true, it is sure to get a good future.

*Mrs. Velthuys* received in 1917 the first class certificate and so is the younger sister of the 17 other ones. For though *Mrs. Frank Pendleton* also received in 1917 this high distinction, this Gladiolus is already well-known in the inland and foreign countries. *Mrs. Velthuys*, however, is quite new and one of the most brilliant Gladioli we know. The separate blooms often become so large that they make us think of *Amaryllis*, while the fiery carmine red color gives the whole an attraction of unknown worth. We had once the pleasure of seeing this variety in the open field and we could convince ourselves of its vigorous stand and luxurious growth, while we shall not easily forget the impression the color made on us. *Mrs. Velthuys* is sure to make a great stir in the Gladiolus world.

The last of the 17 is *Mrs. Frank Pendleton*,

an American sort with fine colored blooms. The dark spot makes a good effect on the lighter pink shade. The spike is excellent and it is different from the other named Gladioli, as the blooms are standing somewhat separate which is in our opinion of particular worth, because this makes it more elegant.

From this we may conclude that among the 17 Gladioli which were awarded with a first class certificate at Haarlem, in the course of the years, there are ten of Dutch origin, at least have been brought in the trade or offered for examination by Dutchmen. They are *Glory of Noordwijk*, *Red Emperor*, *Electra*, *Pink Perfection*, *Prince of Wales*, *Loveliness*, *White Giant*, *Flora*, *Majestic*, *Mrs. Velthuys*. Four of them were of German origin: *Europa*, *Sieger*, *Badenia*, *Liebesfeuer*. One came from France, *Mad. Monnet Sully*, while the U. S. A. gave us two varieties: *Panama* and *Mrs. Frank Pendleton*.

We hope that the number of Dutch Gladioli will always surpass those of the imported ones and not only here, but wherever they are spread all over the world.

Only two *Primulinus Hybrids* were awarded with the first class certificate, namely, *Jane*, in 1914, and *Scarletta*, in 1917. People will ask perhaps if in the two years between these, *Primulinus Hybrids* were not offered for examination because in that time no high certificate was awarded. This has, however, other reasons. Since that time the regulations regarding the first class certificates were changed. And while *Jane* got a certificate already in the first show, *Scarletta* had first to receive all the other distinctions, before it got the highest. In the years 1915, 1916, 1917, several other varieties were given the award of merit, so that we may expect that also varieties of this group will get a prize in the near future.

*Jane* and *Scarletta* differ very much in color, *Jane* is of a fine light yellow with terracotta tint, while *Scarletta* is excellent orange red. Both are very good and will certainly remain principal sorts.

With the *Primulinus Hybrids* we are yet in the beginning, but we may expect much of them. That sorts like *Jane* and *Scarletta* will, however, be surpassed quickly, we don't believe.

### Note by the Editor—

The experience of American growers with *Pink Perfection* is that it has very weak stems and that it is almost impossible to get a good, straight stem during warm weather.

We would call attention to the fact that though ten out of nineteen of the varieties awarded first class certificates are of Holland origin, this does not necessarily reflect on the work of American hybridizers, but it might indicate that but few of the best American sorts have been tried in Holland.

If weather conditions are good we look for a fine display of Gladiolus bloom at the Buffalo show of the American Gladiolus Society, August 14th to 17th. This city is well located to attract Gladiolus growers, being within easy shipping distance of the greater number of growers in the United States. It is hoped that all who are able to do so will show at Buffalo. The prize list is attractive and is arranged so that almost any Gladiolus grower, no matter how small, will be able to fill in some of the classes. If you cannot send stock to exhibit, attend the show anyway and see some of the new varieties actually in bloom.

We are still able to supply the four complete bound volumes of THE MODERN GLADIOLUS GROWER at the price of \$1.25 each postage prepaid.

## THE IRIS.

### The Iris the Poor Man's Orchid.

BY BERTHA BERBERT HAMMOND.

[Written expressly for The Flower Grower.]

BECAUSE of its beauty of form, delicate texture, exquisite coloring and withal moderate cost, the Iris truly deserves its sobriquet, "The Poor Man's Orchid," and at the time of the year, when the borders of Iris are in full bloom, resplendent in regal beauty, it is undeniably also the "Queen of the Garden."

Yet, this charming flower is of easiest culture and yields an unusually large degree of satisfaction and pleasure in proportion to the amount of time and attention which it requires. The Iris, particularly the hybrids of Germanica (*Iris Dalmatica*, *I. Florentina*, *I. foetidissima*, etc.) can be successfully grown with comparatively little effort. While the Iris responds readily and freely to cultivation, it will obligingly grow and bloom even when partially neglected, and when it is once firmly established in suitable environment, it will bloom, multiply and last for years.

The one seeming drawback of the individual plants of this class is the short season of bloom, but by a judicious selection of species and varieties it is possible to secure an uninterrupted succession of flowers from early in the spring until late in July.

In order to assure success in the cultivation of the Iris it is not essential to possess any great amount of experience or training in floriculture. By adhering to simple fundamental principles, the amateur may obtain the most gratifying and lasting results from his planting. Certain varieties have their peculiarities which should be respected. For instance, *Iris pseudo acorus* is at its best if grown near the edge of water or in a boggy, shady place. *I. Kempferi* will bloom freely when planted in deep, rich soil and fully exposed to direct sunlight. While it is possible to grow the Japanese Iris in dry soil, it reaches its greatest perfection if planted in a moist situation. On the other hand, *I. Pumila* and *I. Germanica* will thrive in any good garden soil, providing it is not too wet. If plants do not thrive and increase in one situation, change their positions in the garden until a situation suitable for them is found. Thus, by observing and experimenting, the Iris enthusiast soon learns the requirements of his varieties and how to supply the proper conditions.

As a rule the various species and varieties of Iris obtained from florists are hardy and will endure safely even the severest northern winters. The old-fashioned, showy Iris commonly called "Blue Flag" (a variety of *I. Germanica*) is one of the hardiest of the Iris family, while the Spanish Iris, usually catalogued as hardy, does not, in some localities, live up to the full meaning of the term. If planted in a

sheltered place in sandy, well-drained soil and given protection in cold latitudes it may last for several years, but if placed in poorly drained, tenacious soil, the bulbs are apt to rot or "winter out." When the conditions favorable for this species of Iris cannot be furnished, the safest course is to lift the roots and keep them cool and dry until they can be replanted in the spring. At the north, *Iris Hispanica* is much better adapted to pot culture and forcing than for a garden plant. The tall, elegant *Madam Chereau* and other named varieties of German Iris will be found perfectly satisfactory in hardy beds. When planted in groups or in masses they are very effective.

In a sunny situation in good soil Iris will thrive and increase so rapidly that the clumps will need to be divided about every fourth year. If the clumps are allowed to remain too long in a bed, the rhizomes may be forced above the ground and be injured by exposure. A crowded condition of the roots also results in impairing the vitality of the plants and in making them non-blooming. After the plants are through blooming, is a good time to lift and divide the clumps or it may be done in the fall when the plants are nearly dormant. If the dividing is done after blooming, the re-set plants have an opportunity to make free growth and be in condition to bloom the following spring. By Memorial Day, when cut flowers are in great demand, there is likely to be an abundance of these surpassingly lovely flowers. If cut while in bud and the stems placed in water, the flowers will open in succession and last for days.

Too much cannot be written in favor of and to encourage the free cultivation of these magnificent flowers which almost rival the orchid in beauty and wide range of coloring. The profusion of lovely bloom, hardihood and ease of culture make this class of plants so deservedly popular that no hardy garden can hope to be complete without its full quota of the charming Iris—the orchid of the flower loving masses.

### Northwestern Peony and Iris Society.

Mr. W. F. Christman, Secretary of the above society, is sending out to Peony admirers a Peony Questionnaire, and assuming that he will be glad to send a copy of this to all who have not already received it, we are making note of same for this reason. This Questionnaire is a very carefully prepared and thorough piece of work and Peony growers of experience will be glad to help in summarizing information on the Peony by sending for this blank and filling it out and filing it with Mr. Christman.

### Catalogues and Price Lists.

D. W. C. Ruff, Buena Vista Gardens, Globe Bldg., St. Paul, Minn., 20 page catalogue and price list of his celebrated Peonies. These include many of the best standard varieties and an extra fine collection of the new introductions and many of the varieties listed are already oversold for 1918.

### Rose Bloom for the Benefit of the Red Cross.

A thousand dollars in two weeks is the splendid record made through the street sale of Roses from the garden of Carl F. Morisse, one of Tacoma's (Washington) enthusiastic amateur Rose growers. We learn through one of our correspondents in Tacoma that 23,688 rosebuds and blooms were taken from Mr. Morisse's garden in 1918 for this purpose.

The blooms and buds were sold daily by a group of young girls under the auspices of the Red Cross Gift Shop on the downtown street corners of Tacoma. The receipts from the rose sales during one single day aggregated more than \$200. The roses were sold for 5c. each, or at least this price was asked, but some generous and patriotic buyers paid as much as \$1.00 for the rare beauties.

To those of our subscribers who are not familiar with the fact, we would state that Tacoma and Seattle and indeed perhaps we might say the entire Northern Pacific Coast has a climate that is especially adapted to the growing of Roses. Some beautiful post cards from friends of ours in the state of Washington indicate the rare feast which is in store for those who make their home in that section of the United States or who happen to be there during the Rose blooming period.

### Flowers in War Time.

Food will win the war, but food is not the goal. It is only ammunition. This war is for the souls of people and of peoples. And while we raise potatoes and cabbages to feed the flesh, the spirit must not be forced to wait till the second table. The soul should sit at meat along with the body.

Shall we banish flowers from our gardens? Can we afford to cut music out of our war program? Cabbages are of the rank and file of the fighting forces, but Poppies are the regimental band. Flowers are for solace in the serious business of hoeing cabbages and killing the worms thereon. Potatoes we need for food, but Pansies we must have for thoughts.

It would be to Germanize our land if we cut gay color out of our war gardens and left the gardener only the drab business of serving tables. The wondrous structure of the cabbage may be worth long meditation; but we do not meditate upon it. The Rose compels meditation. Flowers on the mantel are incense offered to the soul of the house—the home. If Germany had thoroughly subdued America a home would not be needed. A house and a cabbage patch would be sufficient.

War is sad business, but it needs no professional landscape crepe-hangers. Dots and dashes, belts and splashes of color are needed in our landscape more than ever. We owe a whole season of garden cheer to the eye of the passerby in our neighborhood. Dooryard color is Red Cross bounty. It is first aid to the war-sick mind and the broken spirit. By taking thought the householder can have a succession of color growing about his house from Spring frost to Autumn frost, and this without subtracting at all from the time he should give to the food garden. The heart will find spare moments for flower culture. Keep the home gardens blooming.—*Minneapolis Journal*.

## WAYSIDE RAMBLINGS

### GLADIOLI FROM SEED.

"Don't forget to plant some seed this year" was a note I read last year in the February issue of the MODERN GLADIOLUS GROWER. Having saved some seed the previous year I followed up the suggestion. Some varieties came up as thick as onions, others only here and there. During the past week I have shaken out the seedlings (they were kept in a cold frame all the winter) and repotted, in some cases all, and in others, a goodly proportion. The following list shows the varieties grown and the results:

Variety	Result
Albion	Very good.
Anamosa	Good.
Angola	Good.
Bleriot	Very poor.
Elberton	Good.
E. Mayer	Fair.
Golden Measure	Fair.
Gold Drop	Fair.
K. P. 15	Poor.
K. P. 34	Good.
K. P. 37	Very good.
Karl Luz	Good.
Lilywhite	Very good.
Prince of Wales	Good.
Roanoke	Fair.
Rev. Ewbank	Very good.
Salmon Beauty	Good.
Sedan	Poor.

I grew 4 other varieties, but as these have not, so far as I have been able to ascertain, appeared in any catalogue, it would be useless to include them in the above list.

Now I am anxious to know when I may expect my first flower. The largest of the seedlings did not measure half an inch, although many were nearly that size. G. C.

### METHODS USED IN PRODUCING NEW VARIETIES OF GLADIOLI.

In a recent number of THE FLOWER GROWER one of your correspondents asks how new varieties of Gladioli are produced, how far primitive forms are used and what primitive forms are.

All varieties, whether simple crosses or true hybrids, are produced by the simple contact of pollen from one variety with the stigma of another, either applied by hand, or by a natural method, such as being carried by winds, or insects, etc. Most varieties have originated by natural methods after the first crossings were made by specialists, and are only modifications of the original cross. A true type or class which more reliably transmits its characteristics to its offspring is almost always necessarily a product of specific crosses.

An original species, so-called, is a variety growing native or wild in a certain part of the world. Considerably over a hundred of such "species" are known but only a small number of these have been used by specialists in producing our present day varieties.

There are still many crosses possible, but most of the "species" are undesirable because of inferior characteristics of size, color, type, etc. The use of the "species" is not generally desirable in producing new varieties excepting when guided by experienced workers, and certain careful combinations must be made in order to avoid mere repetition of earlier breeders. Just the exact combinations used by breeders in producing certain characters, such as the newly acquired trait of ruffling the petals, etc., are usually the secrets of the original producer, and being in the nature of a trade secret are not often imparted to the general public. Each individual experimenter must work out his ideal by the application of such ideas as can be obtained, either from records of earlier experiments or the applications of new ideas of his own.

For the ambitious beginner or amateur I would recommend "The Book of The Gladiolus" by Matthew Crawford and Dr. Van Fleet, published by Vaughan's Seed Stores of Chicago and New York. Those who have access to the files of THE MODERN GLADIOLUS GROWER and THE FLOWER GROWER will find some valuable suggestions in the series of articles by Mr. W. W. Wilmore. Other correspondents have contributed useful information, and in a recent article by Mr. S. E. Spencer valuable suggestions on growing the seeds, etc., are given. In a general way the ideas and principles suggested here are applicable to the production of other kinds of flowers as well as to fruits and vegetables.

A. E. KUNDERD.

### PEELING CORMELS BEFORE PLANTING.

I have been doing this for thirty years and find that I get the best results by planting them as soon as peeled. They should not be planted as early as the ones not peeled as they are liable to rot if the ground is cold and the weather wet or backward. In this latitude (Massachusetts) the first of May is early enough.

I have peeled as many as 1300 cormels in one evening, so the question of labor of peeling need not be a serious item if one gets accustomed to the work.

Some years ago I overlooked 700 peeled *Niagara* cormels for about two weeks when planting. When they were found they had shrunken somewhat, but they were planted and less than 50 of them grew. This told me to plant as soon as peeled.

Ninety per cent of the peeled cormels will germinate while only from 30 to 70% of those not peeled is about my average.

D. E. NELSON.

Note by the Editor—

We understand that the average germination of unpeeled cormels is about 60% according to the experience of the largest growers.

### EARLY BLOOMING.

I have to report my first "Glad" bloom on June 15. Planted March 13, and raised entirely in the open without protection. During its growth we had many frosts and once ice half an inch thick. Variety *Pink Beauty*.

I also wish to report that I have a bloom which appeared June 22 from a bulb planted May 4. It thus bloomed in 49 days from planting. Do you know of a bloom produced any quicker than this? This variety is "Queen of Pinks."

A. J. THOMPSON.

### RESULTS FROM PLANTING MRS. FRANK PENDLETON CORMELS.

In the spring of 1917 I planted a lot of *Pendleton* cormels, at the rate of about 200 cormels to the foot of row, from which I harvested in the fall 2,968 corms. Of these 32 measured  $\frac{3}{4}$  inch or more, 446 measured  $\frac{1}{2}$  inch or more, and 2,490 measured less than  $\frac{1}{2}$  inch each. In other words, a little more than one per cent were No. 4 corms, 15 per cent were No. 5, and 84 per cent were No. 6.

Of course this is no general guide, as it is only the result in one case with a single variety of cormels. But it does give a little idea of what may be expected from the planting of cormels.

C. C. MILLER.

### BALTIMORE AND SALMON QUEEN GLADIOLI.

A subscriber asks to know the difference between *Baltimore* and *Salmon Queen*. He states that having flowered both of them from bulbs purchased from different parties he finds them alike. Can anyone throw a light on this subject?



The above photograph shows how A. E. Kunderd solves the labor problem in war time. It illustrates Anthony B. Kunderd and his crew of husky youngsters. When this crowd gets busy among the Gladioli, the weeds stand a poor chance.

Instances multiply of the large amount of money which has been raised by the sale of flowers and turned over to the Red Cross. Surely the sale of flowers for this purpose is appropriate and we hope that articles published in THE FLOWER GROWER will influence growers to do more along this line.

## Handling and Storing Gladiolus Bulbs.

G. D. BLACK, Albert Lea, Minn., before Minnesota State Horticultural Society.

Gladiolus bulbs are not dead or inanimate things like clods or stones. They are alive and will give us more and better flowers in return for good treatment, just as surely as do our domestic animals give us more and better eggs and milk when we give them the proper attention.

Taking care of the bulbs during their dormant state, from the time they are harvested until they are planted again, has not been given the attention that it deserves. It is not reasonable to expect best results from a bulb that has lost part of its vitality during this time.

What I shall say on this subject will be based on my personal experience.

We commence digging about the middle of September. We first harvest the small bulbs that have grown from bulblets. It is not necessary that these become ripe before they are dug.

We prefer that they do not grow too large, so that we may be able to plant them next spring with our planter. If they are larger than three-fourths of an inch they must be planted by hand.

These small bulbs are usually dug by loosening them with a spading fork, so they may be easily pulled up and broken from the tops into a sieve which will retain the bulbs and permit the soil to be shaken through. As we grow these small bulbs in such large quantities we do this work with a machine of our own construction.

We next harvest the early varieties of the large bulbs and leave the latest varieties until the last. These should also be loosened with the spading fork so that they may be lifted easily from the soil. Large growers use a digger drawn by a horse, which runs under the bulbs without turning them over.

If the bulbs are just ripe enough, the tops can be easily broken off without injury to the bulbs, but if they are tough they should be cut off close to the bulb with a sharp knife.

The roots and old, shriveled bulbs can be pulled off easiest about a month later, before they become too dry. These should always be removed before the bulbs are planted again.

A small quantity of bulbs may be stored in a market basket and placed on a shelf or hung from a joist in the cellar. If there are a number of different varieties that you wish to keep separate, they should be put in paper bags when dug. For storing large quantities we use crates eighteen to forty-eight inches in size. The bulbs should not be more than three or four inches deep in the crates or baskets, as they are liable to sprout or become mouldy if the air cannot circulate among and around them.

They should always be kept dry and cool. A furnace room is usually too dry and warm, a wet cellar is too moist. A cellar which keeps potatoes well is usually all right if the potatoes are kept on the floor and the bulbs overhead. A cool closet that does not freeze is better than a very warm or damp cellar.

They will keep in best condition in a temperature ranging from 32 to 40°, with just enough moisture in the air so that they will not shrink much. Too much moisture will cause them to sprout, which will weaken them as much as when they become too dry. This is the reason that Gladiolus bulbs imported from Holland are seldom satisfactory.

If the temperature and humidity of the air in the storage cellar can be properly controlled, I do not know any reason why Gladiolus bulbs may not be kept in the cellar through the summer and used for forcing in the greenhouse. They could be planted in September and October, or at least two

months before the new crop of bulbs are sufficiently cured to be available for this purpose. We have accidentally demonstrated this to our own satisfaction. In the autumn of 1915 we found two lots of about 100 each in the cellar on the crates that had been overlooked at planting time.

One of the varieties, the *Marie Lemoine*, had grown new bulbs on the old bulbs, while on the crate in a dry cellar, without forming roots or tops. The other variety, *No. 121*, did not form new bulbs, but were somewhat shrunken. We saved both lots and planted them last spring.

The new bulbs of *Marie Lemoine* which formed in the cellar the previous summer produced only a few spikes of bloom. The bulbs of *No. 121*, which had remained in the cellar for two winters and one summer, grew and bloomed just as well as bulbs of the same variety that were a year younger.

A few days ago I found a few bulbs of *Mrs. Francis King* in the bulb cellar at Albert Lea that had formed new bulbs, while in a perfectly dry state. I have these bulbs here as proof of my veracity, as I will admit that I should have been very slow to believe this story until I had the actual experience.

Some time in April, 1915, we sent a small package containing four bulbs to a customer in New York. About a month later he wrote that he had not yet received the bulbs, and we refilled his order. In April, 1916, just about a year after we had sent the first package, he received it and returned it to me, remarking that a history of its journey for a whole year might be interesting.

A neighbor of mine who is a railway mail clerk says that small packages and letters are sometimes left in the mail bags when being emptied, and it is a rule that when ten empty bags accumulate in a car they are made into a bundle and sent to Chicago or some other large terminal. It is supposed that this small package of bulbs was stored away in a bundle of mail bags for about a year before it was discovered and sent on to its destination. Upon examination we found that one of the bulbs in this package had grown a new bulb about an inch in diameter. We planted the new bulb that probably grew in a mail bag and it produced a small spike of bloom. I hesitated quite a while before writing about this incident because it is almost unbelievable to those who have not had much experience with the Gladiolus.

## Red Cross and Hospitals Benefit from Peony Bloom.

At the summer meeting of the Minnesota State Horticultural Society held at University farm, St. Paul, Minn., one of the striking features was the Peony display. D. W. C. Ruff, of St. Paul, captured all of the prizes in the Peony section having one of the finest exhibits ever entered at the state show. All blooms from the exhibition were afterwards sent to St. Paul hospitals.

Red Cross workers were furnished with hundreds of bouquets which were not entered in the exhibition, and the sale from same totaled about \$100 which was divided between the St. Paul and Minneapolis Red Cross chapters.

The sale of flowers for the benefit of Red Cross, which idea was started by THE FLOWER GROWER some months ago seems to have been widely adopted as a means of raising money for Red Cross purposes, and we are pleased to know that we have been instrumental in so great a work.

## The Glad Philosopher's Musings.

"Say it with flowers," is the slogan of the flower shop advertisement, and in this brief, catchy sentence is much philosophy boiled down. When we are saying it with flowers our perfume-laden blossoms are conveying messages of affection or sympathy, speaking a language of the heart—a language that can express no bitter word or unkind thought. When we say it with flowers, we speak in kindly voice with never a trace of impatience or harshness. Let us always, therefore, "say it with flowers."

How significant the fact that there are far more white flowers than of any other color, and not any that are absolutely and totally black. According to Darwin, a far greater proportion of our fragrant flowers are white. Love, joy, purity, hope, sympathy, etc., may be fittingly expressed with flowers, but never anger or despair.

The Glad Philosopher recently asked a friend, "Haven't you a war garden this year?" "No," replied the friend, "I haven't time for it, I'm playing golf now every afternoon. Don't you play golf?" he inquired. "No, I haven't time," the G. P. replied, "I have a war garden."

Judging by the elaboration and detail of the published statements of their transactions, I can't see where some of the cost-system accountants of the war garden get time enough left from their bookkeeping to do very much real gardening.

I'd rather be a make-good know-nothing than a never-make-good know-it-all.

Work hard and then take a vacation. It is nature's plan that work and rest should follow each other in succession, as witnessed in the alternate periods of growth and dormancy of our perennial plants.

While I was out weeding my flower beds one Sunday afternoon recently, my neighbor and his family drove by in their automobile. Little regard for the Sabbath these automobilists have now-a-days, I'll say!

THE GLAD PHILOSOPHER.

## Flowers—An Appreciation.

[Continued from page 81.]

or water flows, or birds fly, wherever day and night meet in twilight, wherever the blue heaven is hung by clouds, or sown by stars, wherever is danger, and awe, and love, there is Beauty, plenteous as rain, shed for thee, and though thou shouldst walk the world over, thou shalt not be able to find a condition inopportune or ignoble."



## The Secret of a Good Lawn.

BY H. G. READING.

[Written expressly for *The Flower Grower*.]

The foundation of a good lawn is good soil. But not every lawn whose foundation is good soil is a good lawn. The first and most important requirement for a fine lawn is to keep the weeds out of it. Keeping the weeds out is not nearly as hard a task as it might appear to be. An early start and persistent effort will soon conquer the weed problem; but if delayed, or the work be not thoroughly done, so that the weeds are allowed to mature and seed, the task is increased very greatly; for, as is well expressed by John Burroughs, "Weeds are so full of expedients, and the one engrossing purpose with them is to multiply."

The commonest weeds that infest lawns are the dandelion, the plantain and the dock—all persistent perennials. The annuals that appear in a new lawn need not occasion any worry, for the lawn mower will prevent their going to seed. Dandelions should be eradicated promptly as soon as their golden yellow flowers reveal their presence. Docks root deeply and are very tenacious of life, so their digging must be carefully and thoroughly done. Plantains can be pulled up easily during the month of August, while at other times their removal is more difficult, requiring a tool. While engaged in digging up or pulling any weeds it is a good plan to have some white clover seed within reach and drop a seed or two in each hole. These quickly germinate, and the clover soon gives a good account of itself.

A mistake that many people make is to spread stable manure on their lawns; the manure had better be dug in the soil when the lawn was first made. There are other fertilizers far more valuable for use as a top dressing, and stable manure always brings a new crop of weeds to eventually ruin the lawn if not eradicated. The very best fertilizer known for a lawn is cotton-seed meal. A ton to the acre would be a liberal rate of application, and it is best applied just before a drizzling rain. On a newly made lawn it should be sown broadcast when the young grass has attained a growth of about two inches. It may also be used on an old lawn to good advantage, and the effect will be immediate and lasting. I first learned of the value of cotton-seed meal as a lawn fertilizer by reading one of Mrs. Ely's garden books a few years ago, and if the book had contained nothing else, this one bit of advice would have been well worth its cost. I have succeeded by the use of cotton-seed meal in making grass grow on hard beaten paths where none could ever be made to grow before, and it gives such vigor to a lawn that it is far more resistant to the burning rays of the sun in dry, hot weather. Mrs. Ely states that she had been asked to desist from using it by her men because it made the grass grow so luxuriously that they were compelled to cut

it every third day during a rainy spring season.

A liberal sowing of wood ashes, or better still, a mixture of wood ashes and bone meal, is highly beneficial as an early spring tonic, and it may be used annually on the lawn with profit.

The appearance of either moss or sorrel indicates a sour soil condition and the need of lime. Lime can be spread broadcast at any time during the winter or early spring, and since clover and some of the grasses demand for their best development a soil devoid of acidity, the importance of an occasional liming is obvious.

Most authorities agree that the best grass for a beautiful lawn is the Kentucky blue grass. Naturally, it cannot do well except in a heavily limed soil. Mrs. Ely's own preference is a mixture of one-third each Kentucky blue grass, red top and Rhode Island bent. Under the dense shade of trees where no grass usually grows a good sod can be produced by first spading up, then spreading leaf mold to the depth of a couple of inches, and sowing wood meadow grass seed.

In purchasing grass seed for the lawn, it always pays to get the best re-cleaned seed, as that offers better insurance against weeds. Lawn seed should be sown on a still day and raked in very lightly. Thorough and persistent rolling is beneficial, and a new lawn should be watered copiously. The first crop of grass should not be cut until it has attained a growth of six inches; even on an established lawn the mower should not be set to cut less than two inches. Lawns should be cut often, leaving the short cuttings lie to decay and follow nature's own way of fertilizing the ground.

Reports from Gladiolus growers indicate for the most part that the growing season has been a favorable one. Although the weather has averaged cool this seems to agree well with Gladioli and although the period of blooming has averaged late, the quality of bloom will doubtless be the better for the delay. However, extreme heat following a cool spell is likely to cause "sunburning" of the buds. While drought has been reported for short periods in some sections, generally the rainfall has been fairly well distributed and so far the Gladiolus season may be said to be a good one.

### CLASSIFIED ADVERTISING.

*Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.*

W. E. KIRCHHOFF CO., Pembroke, N.Y., growers of the finest Gladioli, such as Pendleton, Panama, Niagara, Pink Perfection, Europa, Mrs. Fryer, War, Peace, etc. Correspondence solicited.

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CHAS. F. WASSENBERG, Van Wert, Ohio.

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**WILDFLOWERS** The haunts, habits and uses of our native plants, their behavior under cultivation, and the origination of new forms by sports and hybridizing is the special field of **THE AMERICAN BOTANIST**  
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A HORTICULTURAL DIGEST

Published monthly. Subscription, \$1.50 a year. 286 Fifth Ave., New York, N.Y.

## FRYER'S LIBERTY IRIS

I HAVE HAD many visitors from a distance to see my Iris when in bloom this season, and all spoke very favorably of them. Mr. James Boyd of Philadelphia was here to see them, and he told me that they were the finest Iris that he had ever seen. I wrote to a certain man in Ohio, and told him Mr. Boyd's opinion of my seedlings, and this was his reply: "It is a part of the makeup of Eastern people, when coming West, to praise everything to the skies, and many Western people believe all that they say."

Some people always have their little hammer with them ready for a knock.

I just received a letter from Mr. Boyd, and in part it is as follows: "I hope you will tell your friend from Ohio that Easterners are just as sincere in their expressions of pleasure and appreciation as Westerners are, and I take this opportunity to assure you again that I greatly enjoyed my visit to your garden and think you should be warmly congratulated on the seedling Iris that you have produced. I was particularly impressed with your 'Glory Strain' which is quite distinct and very beautiful. Some colors in your seedlings are the sharpest and clearest I have ever seen and many of your seedlings are exceedingly beautiful."

WILLIS E. FRYER, - - - Mantorville, Minn.

## "THANKS"

WE ARE receiving many kind words from our customers and friends as usual and have endeavored to so conduct our business that we may deserve these compliments and retain all our old customers, when they are in need of bulbs in the future.

"A pleased customer is our best advertisement."

If any of our dealings are not satisfactory kindly let us know.

Wholesale or Retail Catalogue mailed on request.

## G. D. BLACK

Albert Lea,

Minnesota

# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 9

Sept.  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

Entered as second-class matter March 31, 1914, at post office at  
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### The American Gladiolus Society.

Ninth Annual Exhibition of the American Gladiolus Society held in Buffalo, N. Y.,  
August 14, 15 and 16, 1918.

**B**UFFALO was selected this year as the place of holding the annual flower show of the American Gladiolus Society because of its central location. It was hoped to bring out the exhibitors who have not been able to show further East. While the result in this direction was satisfactory, yet there were a number of prominent growers in the West who could have shown in Buffalo who made no attempt to do so. This was partly accounted for by hot weather conditions. This resulted in the deterioration of stock making it unfit for the show bench.

Everything considered the ninth annual show of the society was a most pronounced success. The Iroquois Hotel, where the show was staged, gave up their commodious ball rooms and facilities of the hotel, and the management deserves much praise for its courteous and businesslike treatment of the affair. The co-operation of the local florists was most excellent and they furnished a goodly supply of vases for staging of the large number of flowers displayed. They were also helpful in giving publicity to the show and the attendance by local flower lovers was all that could be expected. Many out-of-town visitors were also present and a number of Gladiolus enthusiasts from the Canadian side showed their appreciation of the beautiful display. While the show was advertised as continuing for four days, it was agreed among the members and exhibitors that it should be terminated on the third day, August 16th.

Four days is rather too long for a Gladiolus show, especially if the weather is warm, and the first day of the show in Buffalo and the day preceding was

extremely warm, and the flowers arrived pretty well bloomed out so that they would have been in rather poor condition for a four day's show.

While all of the exhibitors deserve much credit for the painstaking work which their entries showed, yet the display of John Scheepers & Co. stood out above any other as containing the most perfect bloom and the most meritorious varieties. This display contained about 700 spikes of flowers and embraced forty-six different varieties. This stock, as we understand it, was all grown on the T. A. Havemeyer Estate on Long Island where John Scheepers tries out new varieties of Gladioli and other bulbous plants. As usual the variety, *Golden Measure*, was a prominent feature of the Havemeyer display. *Badenia* and *Muriel* were represented as were some of Kunderd's specialties, *Mrs. Dr. Norton*, *Purple Glory* and *Giant White*; also Mrs. Austin's *Evelyn Kirland* and Le-moine's *Madam Mounet Sully* were prominently represented. Altogether this display was worthy of a special note and of the prizes which were awarded it.

Buffalo being the nearest location to the Editor's home at which the society's show has ever been held, he made a special effort to stage a large number of blooms and had been accumulating a supply for this purpose in his cold storage room for more than two weeks prior to the show. Some of the stock which sojourned for some days in the cooler did not show up as well as it might have done if



GLADIOLUS—MARIE KUNDERD.

Described by the originator, A. E. Kunderd, as the grandest of all whites, as early as *Chicago White* and of a very pure color with an almost invisible soft pink line in the center of the lower petals. One of Kunderd's 1918 introductions.

freshly cut, but as the Editor is a refrigerating engineer and has a cooler available, naturally he likes to employ it in connection with his flower growing. Also, without a cooler it would not have been possible for him to have staged nearly one thousand spikes as he did at the Buffalo show. Among the best varieties represented in the Editor's collection were *Purple Glory*, *Myrtle*, *Mrs. Dr. Norton*, *Schwaben*, *Pink Perfection*, *Goliath*, *Cardisun*, *Herada*, *Evelyn Kirtland*, *Crimson Glow*, *Mrs. G. W. Moulton* and *Madam Mounet Sully*.

The display of seedlings was unusually fine, W. E. Kirchhoff, Pembroke, N. Y., having a fine collection and also making a fine display of a large number of varieties. Jacob Thomann & Sons, Rochester, N. Y., were also present with their collection of beautiful seedlings and occupied a prominent position in the hall.

C. Zeestraten, of Bemus Point, N. Y., being located near Buffalo, was able to stage some very beautiful stock in fine, fresh condition and was given an award of merit for general display of fine stock.

In the Grullemans Co.'s exhibit was noted a new *Primulinus* variety, *General Pershing*, a lavender, with a yellow throat.

The seedling never before exhibited which won the silver medal for John Scheepers & Co., was a perfect spike of very light flesh pink, growing slightly darker towards the ends of the flower petals. The bronze medal in this class was carried off by a beautiful pink variety.

The Scheepers' seedling that carried off the Burpee trophy was a remarkably fine specimen, consisting of six spikes of a delicate silky white, suffused light pink toward the end of the flower petal. The seedling was named *Miss Edith Cavell*.

The Austin-Coleman Co., Wayland, Ohio, showed an excellent pure white seedling, which received an award of merit. This variety would have won the society's silver medal except for the fact that it had been shown elsewhere.

The judges commented especially on the quality of the *Primulinus Hybrids* shown. Those displayed at the flower shows seem to be improving from year to year and it is expected that some very beautiful *Primulinus Hybrids* are yet to be developed.

The Editor regrets that owing to the sustained exertion necessary to the staging of such a large number of flowers in so many different classes that he was unable during the short time that he was in attendance at the show to make notes of the winning varieties and observations on the exhibits, and what is reported above is partly extracted from the trade paper reports of the show. Those who cannot attend the flower shows like to know what varieties are winners and besides they have a right to know. We promise ourselves each year that we will make it a point to report next year's show in better shape, but when show time comes we seem to find ourselves in the same condition.

## SCHEDULE OF PRIZES.

## OPEN TO ALL.

- |         | 1st     | 2nd    |   |
|---------|---------|--------|---|
| No. 1—  | \$12.50 | \$7.00 | Best collection, 20 varieties, 5 spikes each, named. First won by C. Zeestraten, Bemus Point, N. Y. Second won by Madison Cooper, Calcium, N. Y.  |
| No. 2—  | 7.50    | 5.00   | Best 12 varieties, 3 spikes each, named. First won by John Scheepers & Co., New York, N. Y. Second won by Madison Cooper, Calcium, N. Y.  |
| No. 3—  | 6.00    | 3.00   | Best 12 vases, 12 varieties, 1 spike each. First won by Madison Cooper. Second won by C. Zeestraten.  |
| No. 4—  | 10.00   | 5.00   | Five vases, 5 varieties, 10 spikes each, predominating color Yellow. First won by John Scheepers & Co. Second won by Madison Cooper.  |
| No. 5—  | 7.50    | 5.00   | Vase of 25 spikes, <i>Primulinus Hybrids</i> , Orange. First won by Madison Cooper. Second won by The Grullemans Co., Avon-on-the-Lake, Ohio.   |
| No. 6—  | 7.50    | 5.00   | Vase of 25 spikes, <i>Primulinus Hybrids</i> , Yellow. First won by Madison Cooper. Second won by The Grullemans Co.  |
| No. 7—  | 7.50    | 5.00   | Vase of 25 spikes, <i>Primulinus Hybrids</i> , any other color. First won by C. Zeestraten. Second won by The Grullemans Co.  |
| No. 8—  | 4.00    | 2.00   | Six spikes, White, one variety named. First won by C. Zeestraten with <i>Europa</i> . Second won by John Scheepers & Co.  |
| No. 9—  | 4.00    | 2.00   | Six spikes, Yellow, one variety named. First won by John Scheepers & Co. with <i>Golden Measure</i> . Second won by Madison Cooper.   |
| No. 10— | 4.00    | 2.00   | Six spikes, Pink or Blush, one variety named. First won by C. Zeestraten & Co. with <i>Pink Perfection</i> . Second won by John Scheepers & Co.   |
| No. 11— | 4.00    | 2.00   | Six spikes, Crimson or Red, one variety named. First won by John Scheepers & Co. with <i>Liebesfeuer</i> . Second won by Madison Cooper.  |
| No. 12— | 4.00    | 2.00   | Six spikes, Blue or Purple, one variety named. First won by John Scheepers & Co. with <i>Badenia</i> . Second won by Madison Cooper.  |
| No. 13— | 4.00    | 2.00   | Six spikes, Ruffled, one variety named. First won by Madison Cooper with <i>Purple Glory</i> . Second won by John Scheepers & Co.   |
| No. 14— |         |        | Best seedling <i>Gladiolus</i> never before exhibited. American <i>Gladiolus</i> Society's medals. First prize, Silver Medal, won by John Scheepers & Co. Second prize, Bronze Medal, won by Austin-Coleman Co., Wayland, Ohio. |

## G. D. Black, Albert Lea, Minn.

- No. 15—Best 12 spikes *Golden King*. First prize, 60 bulbs *Blackhawk*; second, 40 bulbs *Blackhawk*.  
No. 16—Best 12 spikes *Blackhawk*. First prize, 60 bulbs *Golden King*; second, 40 bulbs *Golden King*.

## W. Atlee Burpee &amp; Co., Philadelphia, Pa.

- No. 17—Best and most distinct new seedling, 6 spikes, never exhibited before the American *Gladiolus* Society. Offers as first prize a Silver Cup, known as Burpee Trophy and \$5 cash, won by John Scheepers & Co. Second prize, \$5 cash, won by H. E. Meader, Dover, N. H.

## Homer F. Chase, Wilton, N. H.

- No. 18—Best 10 spikes *Mrs. Watt*. First prize 200 first-size bulbs *Mrs. Watt*, won by The Grullemans Co. Second prize 100 first size bulbs same variety.

## Earl Edgerton, Lansing, Mich.

- No. 19—Best new Yellow Seedling nearest in color to *Golden Spur* Narcissus. First prize, \$5 worth of bulbs winner's selection, won by The Grullemans Co. Second prize, \$3 worth of same.

## Willis E. Fryer, Mantorville, Minn.

- No. 20—For best 12 spikes *Mrs. W. E. Fryer*. Offers 50 bulbs of that variety.

## Austin-Coleman Co., Wayland, O.

- No. 21—For best new Yellow variety, 3 or more spikes, \$5.

## Munsell &amp; Harvey, Ashtabula, O.

- No. 22—Best vase any Red variety not less than 10 spikes. First prize 30 bulbs *Hazel Harvey*, won by The Grullemans Co. with *Pride of Hillegom*. Second prize, 25 bulbs same variety.

## Miss Gretchen Zang, Ravenna, O.

## Austin-Coleman Co., Wayland, Ohio.

- No. 23—Vase 6 spikes *Gretchen Zang*. First prize, Silver Cup valued at \$15, offered by Miss Zang, won by Austin-Coleman Co. Second prize, 50 corns *Gretchen Zang*, offered by Austin-Coleman Co.

## C. W. Brown &amp; Son, Ashland, Mass.

- No. 24—Best 3 spikes any new seedling never before shown. Offers 25 bulbs *Mrs. O. W. Halladay*, won by The Grullemans Co.

## THE FLOWER GROWER, Calcium, N. Y.

- No. 25—To every exhibitor in the Open Class, not already a subscriber to THE FLOWER GROWER, one year's subscription.

## A. E. Kunderd, Goshen, Ind.,

- Offers in each of the following classes bulbs to the value of the prizes set forth for each class:

## 1st 2nd

- |         |        |        |   |
|---------|--------|--------|---|
| No. 26— | \$5.00 | \$3.00 | Best 6 spikes <i>Purple Glory</i> . First won by John Scheepers & Co.   |
| No. 27— | 5.00   | 3.00   | Best 6 spikes <i>Myrtle</i> . First won by Madison Cooper.  |
| No. 28— | 5.00   | 3.00   | Best 6 spikes <i>Mrs. Frank Pendleton</i> . First won by Mrs. H. H. Boyce, Buffalo, N. Y. Second won by John Scheepers & Co.  |
| No. 29— | 5.00   | 3.00   | Best 6 spikes <i>Summer Beauty</i> .  |
| No. 30— | 5.00   | 3.00   | Best 6 spikes <i>Mary Pickford</i> .  |
| No. 31— | 5.00   | 3.00   | Best 6 spikes <i>Pride of Lancaster</i> .   |
| No. 32— | 5.00   | 3.00   | Best 6 spikes <i>Orange Glory</i> .   |
| No. 33— | 5.00   | 3.00   | Best 6 spikes <i>Arizona Rose</i> .   |
| No. 34— | 5.00   | 3.00   | Best 6 spikes <i>Sweet Orra</i> .   |
| No. 35— | 5.00   | 3.00   | Best 6 spikes <i>Butterfly</i> .  |
| No. 36— |        |        | Best display of Kunderd varieties not less than 15 spikes nor more than 25 spikes, First prize \$10.00, won by Madison Cooper. Second prize \$6.00; third prize \$4.00. All prizes to be paid in stock. |

## FOR NON-COMMERCIAL GROWERS.

## 1st 2nd

- |         |         |        |   |
|---------|---------|--------|---|
| No. 51— | \$10.00 | \$5.00 | Collection 10 named varieties, 3 spikes each. First won by Madison Cooper. Second won by A. A. Rosin, Rochester, N. Y.  |
| No. 52— | 10.00   | 5.00   | Largest collection Ruffled varieties, 3 spikes each. First won by Madison Cooper.   |
| No. 53— | 5.00    | 2.50   | Six spikes, White, one variety named. First won by A. A. Rosin with <i>Glory of Holland</i> . Second won by Madison Cooper.   |
| No. 54— | 5.00    | 2.50   | Six spikes, Yellow, one variety named. First won by Madison Cooper with <i>Schwaben</i> . Second won by O. C. Curtis, Leroy, N. Y.  |
| No. 55— | 5.00    | 2.50   | Six spikes, Pink or Blush, one variety named. First won by Madison Cooper with <i>Pink Perfection</i> . Second won by O. C. Curtis.   |
| No. 56— | 5.00    | 2.50   | Six spikes, Crimson or Red, one variety named. First won by Madison Cooper with <i>Cardisun</i> . Second won by Mrs. H. H. Boyce.   |
| No. 57— | 5.00    | 2.50   | Six spikes, Blue, Purple or Lavender, one variety named. First won by A. A. Rosin with <i>Baron Hulot</i> . Second won by C. W. Clapp, Kenmore, N. Y.   |
| No. 58— | 5.00    | 2.50   | Six spikes, any other color, one variety named. First won by O. C. Curtis. Second won by Madison Cooper.  |
| No. 59— | 3.00    | 2.00   | Three spikes, White, one variety named. First won by Mrs. H. H. Boyce. Second won by Madison Cooper.  |
| No. 60— | 3.00    | 2.00   | Three spikes, Yellow, one variety named. First won by Madison Cooper. Second won by A. A. Rosin.  |
| No. 61— | 3.00    | 2.00   | Three spikes, Pink or Blush, one variety named. First won by C. W. Clapp. Second won by O. C. Curtis.   |
| No. 62— | 3.00    | 2.00   | Three spikes, Crimson or Red, one variety named. First won by Madison Cooper. Second won by A. A. Rosin.  |
| No. 63— | 3.00    | 2.00   | Three spikes, Blue, Purple or Lavender, one variety named. First won by O. C. Curtis. Second won by Madison Cooper.   |
| No. 64— | 3.00    | 2.00   | Three spikes, any other color, one variety named. First won by H. E. Christwell, Buffalo, N. Y. Second won by Madison Cooper.   |
| No. 65— |         |        | Best exhibit of at least 15 varieties correctly named, 3 spikes each. American <i>Gladiolus</i> Society's medals. First prize, Silver Medal, won by Madison Cooper. Second prize Bronze Medal.                      |
| No. 66— |         |        | Best and largest exhibit of new varieties introduced in 1917 and 1918, at least 10 varieties, 1 spike each, named. American <i>Gladiolus</i> Society's medals. First prize Silver Medal. Second prize Bronze Medal. |

## Charles F. Fairbanks, Boston, Mass.

## 1st 2nd

- No. 67—\$ 5.00 \$3.00—Vase 10 spikes *Primulinus Hybrids*, Orange. First won by Madison Cooper. Second won by Mrs. H. H. Boyce.

(Concluded on page 98.)

## MRS. AUSTIN'S TALKS

[Written expressly for The Flower Grower.]

### A Trip and Some Peonies Worth Seeing.

"WE'RE going to see Carl," was the surprising announcement made by the Head of the House some few weeks ago. It was surprising because, for a number of years past we have lived with our Gladioli so constantly that we have not been treating ourselves to trips entirely for pleasure, and perhaps had fallen into the stay-at-home rut, but the desire to visit this much loved one and the wife we never had met, had become deep seated in our hearts for a long time and had at last reached the point where it could be put off no longer, so almost before we realized it we were on our way to Minnesota, St. Paul being the objective point.

As we left our home I looked regretfully at the long row of Champion of England Peas that would be just right to can while we were gone, but consoled myself with the thought of the several jars already cold-pack processed and—well likely there would be plenty of sweet corn, anyway, and one has to go when the opportunity comes. I hoped the Roses would keep on blooming, but my last glance rested lovingly on the row of Seedling Gladioli and I wondered if Nature in her marvelous munificence might not have a good *new* one hidden there for me.

There had been a rain the night before and my first daylight view out of door in Minnesota, was of a dewy glistening world, of a wood in the near distance, of clinging vines and shrubs, of birdhouses and gardens and then a garden. I'm not going to tell you anything about it now but sometime when the bleakness of winter's chill weighs heavily upon us, I will ask you to go with me back to those beautiful July days and the luxuriant loveliness of Carl's Garden.

The Twin Cities were arrayed in their richest robes. The emerald velvet of their lawns banded with rich brown of the many oiled boulevards, set with the sparkling waters of numerous lakes, combined with the dignity of the great Mississippi presented a scene never to be forgotten.

The various windings and curves of the boulevards were ideally picturesque but being accustomed to the straight roads of Ohio's Western Reserve, I sought in vain for "Danger, Sound Klaxon," "Drive Slow, Sharp Curve Ahead" and similar warning signs placed by Automobile Clubs near our occasional curves, and invariably closed my eyes prepared for the worst, only to open them and find the driver visiting happily and perhaps rounding unconcernedly an even sharper curve. But there were multitudes of joyous autoists and as I forgot my fear the explorer's mantle fell upon me and I



eagerly watched for the unseen charms just ahead. One especially delightful hour was spent in the Wild-flower Garden.

Our rides carried us into the vicinity of flower-loving friends whose faces we were seeing for the first time, and our call at the home of Mr. and Mrs. D. W. C. Ruff at Bald Eagle Lake was one

of those at which our reception was so delightfully cordial that it will ever be a pleasant recollection. Here were long, strong spikes of Gladioli ready to be sent to the customer, and a wonderful growth of Peonies many of which were prize winners. We also noted with interest his method of clipping the Iris to promote strong root growth. The foliage being cut straight across about halfway to the ground.

We were charmingly entertained at the home of W. F. Christman and wife, both of whom were former residents of our Ohio town. Here were seen some of the choicest Peonies in existence and although it was at twilight hour their strong thrifty growth was very noticeable. As his larger plantings were several miles away we did not have the opportunity to see them.

Starting early a ride on the R. R. of about forty miles, partly across prairie brought us to Faribault. A short auto drive across the valley and up the hillside and we were at our destination. There a homelike feeling came over us for we were on a hill-top from which the view into the distance resembled the one from our Elm Hill Farm. On that hill were Peonies, and then more Peonies. There were plantings of Seedlings that had bloomed and the most promising ones marked for further trial. There were others that had stood the test of excellence, which in most cases was a trial of ten years, and were ready to receive their names and make their debut to the world. Others were waiting to go at the first call as the shipping season opened. As we went from one field to another we noticed the intense cultivation given them and the entire absence of weeds. Half way down the hillside we came to the birth-place of *Martha Bullock*, one of the finest and largest Peonies in the world, for we were at the home of The Brand Peonies. When this variety first reached its perfection it was so distinct and conspicuous that a non-interested helper said to the originator: "I'll give you ten dollars for that big one in the middle," and the reply was: "Not for ten thousand would I part with it." And the thought came to me that if a Gladiolus bulb is worth a thousand dollars why shouldn't a Peony root be worth ten thousand.

The season for Peony planting is now at hand, for although it may be planted almost any time from Sept. first until growth begins in the spring and will grow and bloom under conditions in

which most plants would die, it is best to plant about the middle of September and give the little feeding roots a chance to start into growth enabling the plant to become better established and to make a stronger growth in the spring.

They will grow well in any good fertile soil in which vegetables will do well but if your soil needs enriching be sure that the manure is well rotted as fresh manure near the roots would be injurious. Plant so that the buds or eyes will be from two to three inches below the surface and in cultivating be careful to not ridge them up. Deep planting will often prevent blooming. The Peony is so hardy that it is unnecessary to protect it usually but if roots are planted late it is well to give them a little straw covering the first winter.

It is a grand flower and should be in every garden.

MRS. A. H. AUSTIN.

### Propagating Roses by Fall Cuttings.

Climbing Roses are propagated mostly by hardwood cuttings made in the fall. Many cut-flower Roses may be propagated in the same way.

Hardwood cuttings are taken from the dormant wood of winter, while softwood, or greenwood, cuttings are taken when the plants are in active growth. To make a hardwood cutting, good, strong, well ripened shoots of the past summer's growth should be selected. These are better if cut between the time the leaves fall and freezing weather. If left until after cold weather, there is danger of injury from freezing. They should be cut into pieces of five or six inches, with the upper cut just above a bud, and should be tied in bundles with raffia or with string that does not rot easily if exposed to dampness. After labeling plainly, they should be buried in moist sand, tops down, and placed in a cool cellar, or buried in the open ground below danger of frost. They should be planted in the open ground, in the spring, about or a little before corn-planting time, so that one or two eyes, or not over one inch of the cutting, are above ground, which will leave four or five inches in the ground. Care must be taken not to injure the calluses that have formed while the cuttings were buried. Sometimes better results are obtained by planting in partial shade.

Frequently cuttings made in winter or early spring do nearly as well as those made in the fall, but in the North there is always danger of the wood being injured during the winter.—*Countryside Magazine*.

One of our correspondents wants information about the construction of a small green-house with suggestions as to cost for a given size, and including simple method of heating. Those who have had experience along this line who can put it into shape so that it will help others, would show a public-spiritedness by preparing a short article on this subject for publication in the columns of THE FLOWER GROWER. Gardeners not so provided feel the need of a small green-house at times and we are all looking forward to having such a place so that we can grow flowers during winter as well as in summer. The construction of a small greenhouse should be as simple as possible.

## The Flower Grower

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Vol. V September, 1918 No. 9

"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### A Word About Prices.

This is the time of year when Gladiolus growers begin to think about next year's catalogue and price lists, and they wonder how prices will be as compared to former years. Those who are new to the business will do well to consult the older growers. They should not be afraid to do this because those who have had experience in the business are invariably glad to assist those who are just starting in.

The new beginner is likely to make a mess of it if he tries to fix his own prices. Some prices he will probably get too high, but for the most part he is likely to make them too low. The new man in the business does not know what it costs to produce and market his product. Those who have been in the business for some years are better posted. Costs are a very difficult thing to determine at best and not all the details of same always appear on the surface. We know of some experienced business men who made a poor success of the Gladiolus business because they attempted to apply a system of costs and accounting, which might apply to a manufacturing business, to the growing of a crop which is impracticable. A crop is an indefinite thing until it is actually harvested. So many conditions, especially the weather, come in to influence the size of the crop and the quality of it, that any cost keeping system is likely to go wrong when applied to the producing of bulbs. Under present conditions there is surely no good reason for cutting prices as costs are higher than they were during former years and are running higher all the time.

Those who are just starting should not figure on cutting prices expecting that they will take business away from other growers. The new beginner must develop his own field and his own customers, and this must be done by skillful and conscientious treatment and the delivering of a high quality of product. It cannot be done by mere cutting of prices.

Therefore, we repeat again, consult the older growers and in these times of high labor costs especially, do not think of quoting prices below what they have been during former years. Prices should instead be advanced moderately in keeping with advancing costs.

MADISON COOPER.

### War Time Conservation.

Conservation during war time is not only to be commended but it is a patriotic duty. This little lecture is for the purpose of calling attention to economies which are possible whether compelled by necessity or not.

Under war time conditions with high moral principles and the very existence of free government at stake, any person who wastes *anything*, whether a food product or other thing, is guilty of a neglect if not indeed a positive crime. Let us, therefore, look the situation in the face and economize where we can and in whatever way we can. All sorts of materials, food and clothing and everything else are produced by labor, and labor is in extremely short supply with so many men under arms.

Be careful in food consumption. Limit the diet to easily produced cheap foods for the most part and eliminate the extravagant and expensive luxuries. In clothing make the old suit do another month or two and likewise with other items of wearing apparel.

It makes no difference whether one is financially compelled to economize or not, economy is necessary on the part of everyone to win the war. Unnecessary consumption or waste of anything necessary to human life during a time like this is a crime.

MADISON COOPER.

Since the above was written during the month of December, 1917, no less an authority than our Secretary of the Treasury and Administrator of the Railways, Hon. Wm. G. McAdoo, has publicly advocated old and patched clothes. Make your old suit do not simply a month or two longer, but a year longer. If patches are to be the fashion, let us have some patches also.

M. C.

We have already suggested the desirability of dividing prize money at flower shows into at least three parts, first, second and third, and in some cases it is wise to make a fourth prize. This will have a tendency to induce a greater entry as those who are comparatively new at the flower show will feel that they have some chance against those who have had more experience, and if there are three or four prizes in each class, they will feel that they may be able to get some of the smaller money if they cannot win a first or second. There is still another reason for dividing the prize money into a larger number of units—where there is only one entry in a class the first prize winner does not carry away the larger part of the money as he would if there were only two prizes. In a number of classes at the recent flower show at Buffalo there was only one entry and where the exhibit is meritorious, the judges are bound to give first prize to such an entry even though there is no competition. Any exhibitor who has enterprise enough to enter any of the classes offered is entitled to his honors and first prize if his stock is of good quality, but if the prize money were divided into at least three parts, and possibly four, he would not take away such a large share of the total prize money.

We beg to again suggest that those who are offering prizes at the flower shows should request the secretary to divide it into at least three parts.

To get posted and keep posted on flowers nothing will take the place of the annual flower show. New varieties of distinct merit become known first at the flower shows and the old standbys make themselves manifest likewise at the flower shows.

## The Boston Horticultural Society Show.

The show held at Horticultural Hall, Boston, Aug. 10 and 11, was called a Gladiolus and Phlox exhibition and was also to include vegetables and fruit, but was almost entirely confined to Gladioli of which there was a goodly number of spikes shown. The quality, however, was much inferior to the shows given in former years, most of the spikes sent by express arriving in poor condition. A notable exception was the exhibit of S. E. Spencer who, owing to his location, could bring his spikes in his truck the day before and had his exhibit in perfect condition. Only one end of the lower hall was used and that was confined to the trade exhibits. The center was occupied by S. E. Spencer and his vases of *Mrs. Pendleton* and *Panama* attracted the attention of all.

The other exhibitors were: Thomas M. Proctor, Wrentham, Mass.; H. E. Meader, Dover, N. H.; Thomas Cogger, Melrose, Mass. and C. W. Brown & Son, Ashland, Mass. H. E. Meader showed several vases of *Lilywhite*. C. W. Brown & Son featured *Mrs. O. W. Halladay* and introduced *Devens* a new scarlet. *The Boston Transcript* featured this variety with large headlines and the following is an extract from that paper: "*Devens* is the name of a new flower contributed by C. W. Brown & Son. Mr. Brown has a son, Lieut. Willis C. Brown, who has been at Camp Devens, and it is in recognition of the young man's early camp experiences that this variety of flaming scarlet is named. Lieut. Brown is now stationed at Fort Bliss, Texas, but is home at this time on a short leave of absence."

Thomas Cogger, of Melrose, featured a new white variety named *Miss Helen Franklin*. This is a clear white with violet stripes on lower petals and is deeply ruffled. It was awarded a Silver Medal. Mr. Cogger will introduce the variety next season.

The stage of the upper hall was occupied by Jelle Roos with a choice lot of blooms.

In the competitive classes, Thomas M. Proctor was awarded first on six vases of White, three spikes of each, showing *Augusta*, *Chicago White*, *Europa*, *Glory of Holland*, *Meadowvale*, *Miss Helen Franklin*; S. E. Spencer, 2nd.

Six vases Pink—S. E. Spencer, 1st, with *Dawn*, *Evelyn Kirtland*, *Mrs. F. D. Rand*, *Mrs. Pendleton*, *Panama* and *Rosea Superba*; H. E. Meader, 2nd.

Six vases Red—S. E. Spencer, 1st, with *Cracker Jack*, *Ida Van*, *Mrs. Francis King*, *Mrs. W. E. Fryer*, *Princepine* and (?) ; H. E. Meader, 2nd.

Six vases Yellow—Jelle Roos, 1st.

Six vases Lavender or Mauve—H. E. Meader, 1st. Three of these were distinctly Blue and should have been disqualified.

Six vases, any other color—H. E. Meader, 1st. Three vases of this lot were Pink and one Yellow, leaving but two vases that would qualify. It is to be regretted that exhibitors are so rushed to get their display ready on

time that these errors are overlooked.

Six Lemoinei Hybrid—C. W. Brown & Son, 1st, with *Cracker Jack*; H. E. Meader, 2nd, with *Baron Joseph Hulot*.

Six *Primulinus Hybrids*, S. E. Spencer, 1st; H. E. Meader, 2nd.

Best Seedling—H. E. Meader 1st with a large pure red and Miss Fannie Foster 2nd with a handsome white. Evidently warlike colors are favorites.

Fifty named varieties—H. E. Meader, 1st; Jelle Roos, 2nd. These lots were not nearly up to the usual standard and the winning collection had some unnamed seedlings included.

Twelve named varieties—H. E. Meader, 1st, with *America*, *Golden Measure*, *Mrs. Francis King*, *Mrs. G. W. Moulton*, *Mrs. Dr. Norton*, *Nymphy*, *Ophir*, *Pesa*, *Purple Glory*, *Panama*, *Princepine*, *Red Amarillas*; C. W. Brown & Son, 2nd, with *Aeolian*, *Byron L. Smith*, *Fashoda*, *Fair Columbian*, *Flamboyant*, *Liebesfeuer*, *Loveliness*, *Mrs. Francis King*, *Monon*, *Pride of Hillegom*, *Rouge Torch*, *Symmetry*.

On comparison you will note that *Mrs. Francis King* was the only variety shown by both the two leading competitors. Thomas M. Proctor showed 12 that were nearly equal to the above and this part of the show was certainly first class.

Six spikes Crimson—H. E. Meader, 1st, with *Purple Glory* which is certainly a long way from crimson; Jelle Roos, 2nd, also showing a variety which was anything but crimson. (See official color chart.)

Six spikes Pink—H. E. Meader, 1st; S. E. Spencer, 2nd, both showing *Panama*.

Six spikes Red—H. E. Meader, 1st; Thomas Proctor, 2nd. The winning vase being of *Red Amarillas*.

Six spikes Yellow—Thomas M. Proctor, 1st, with *Schwaben*; H. E. Meader, 2nd.

Six spikes any other color—Thomas Cogger with *Miss Helen Franklin*, 1st; H. E. Meader, 2nd.

The attendance was better than usual for the August shows and some good orders were reported.

CLARK W. BROWN.

## Primulinus Hybrids.

Many growers believe that the *Primulinus* strain is the most graceful and decorative of the entire Gladiolus family. They now include a very wide range of colors. It was for a long time understood that the *Primulinus Hybrids* only embraced the orange and yellow shades for the most part, but now many other shades are being developed. The especial charm of the *Primulinus* is its graceful and willowy spike and those who are growing should stick closely to the *Primulinus* type and not increase Hybrids which do not show clearly the *Primulinus* characteristics.

The *Primulinus Hybrids* are easily propagated, as they for the most part, make a great number of cormels of unusual vitality and many of them will bloom the first year. *Primulinus* also sets seeds very prolificly, and *Primulinus* seedlings are always interesting.

## Growing the Peony.

H. W. Groschner, Ohio, who makes a specialty of Peonies as well as Gladioli, sends out printed cultural directions for Peonies as follows:

### CULTURAL INSTRUCTIONS FOR PEONIES.

Plant so that the top eye is not more than two or three inches under ground. Water when planting.

### PEONY DONT'S.

Do not plant in stiff yellow clay.

Do not mix manure among roots, surround roots with clean soil.

Do not plant along side of brick wall.

Do not plant where ground is so low that water is liable to form pools during winter months.

For cut flowers, cut before flowers are fully opened.

### MORE CULTURAL INSTRUCTIONS.

I desire to impress upon the public that too much fresh manure has caused more Peony troubles than any other causes combined. Do not heap manure upon the very center of the plant but keep away about six inches.

Peonies dislike a sour soil. (It is sometimes a cause of shy flowers.) The soil in some Peony beds has been soured by the use of too much manure.

Peonies enjoy plenty of moisture during their main growing and blooming season (up to the latter part of June) after that a good soaking occasionally until latter part of July.

The Peony is as hardy as a plant can be and protection is needed only after the first season planted. (to prevent the frost from throwing out the plants) do not cover too deep. Too heavy covering has been a cause of shy flowering.

### DIVIDING.

As long as your plants are doing well, do not divide but let them alone, after eight or ten years it is time to think of dividing them but if they are fertilized occasionally they can remain undisturbed for twenty years.

The very best time to move Peonies is after the middle of August until early October and until the ground freezes. I especially advise very early fall planting for small size roots, but even late fall planting is far better than Spring planting. Spring planting should not be attempted by inexperienced people.

Peonies don't like too much stirring of the ground about their stems. Be careful in the Spring when removing the protecting materials. It is advisable to remove it very early say about the first of April. Be careful when unpacking the plants that none of the eyes are broken. A broken large eye means that you will get one less bloom.

Do not cut the stems off close to the ground after flowering. Even when flowers are picked too much of the stem should not be removed. Leave at least six inches.

### IRIS CULTURAL INSTRUCTIONS.

Iris *Germanica* prefer a heavy soil.

Do not let fresh stable manure come in direct contact with roots or foliage.

Do not plant too deep, barely cover the thick roots and press the soil down firmly.

Iris *Germanica* are not aquatics and should not be planted near the edge of ponds, they prefer a rather dry and sunny situation, but they will stand some shade if the soil is well drained. Divide the plants every three or four years, the best time to do this is right after flowering. (If divided at this time they will need some moisture occasionally) or along about August. Iris are as hardy as a plant can be and no winter protection is needed the first year after planted and covering material is needed only to prevent the frost from throwing them out of the ground, the best covering material is straw or coarse litter, if leaves are used, do not cover too heavy.

Comparatively few of our subscribers have called for index for Volume IV. We can furnish index not only for Volume IV, but for Volumes I, II and III on request. Also, we have bound Volumes I, II, III and IV for sale, the set for \$5.00 prepaid.

In the August issue of THE FLOWER GROWER we neglected in mentioning the Peony Questionnaire of the Northwestern Peony and Iris Society to give the secretary's address. Address W. F. Christman, Secretary, 3804 Fifth Ave., South, Minneapolis, Minn.

## THE IRIS.

### Iris Kaempferi.

[Written expressly for *The Flower Grower*.]

This valuable contribution to the Iris family introduced from Japan, differs in form and in the time and length of its season of bloom from most other sorts of Iris. There are both single and double varieties and they show a marvelous range in their coloring, blending delicately from pure snow white to a deep, rich plum color and royal purple. Their blooming season being later than the ordinary varieties, the flowers coming when there is a dearth of bloom in the garden, makes them especially welcome and desirable for cutting and other decorative purposes.

The plant can readily be started from seeds or from a division of the old clumps; seedlings usually blooming the third year after sowing. In planting roots, place them in rich, moist soil, about as deep as they were before transplanting, with the crown quite near to the surface. Resetting can be done with success at almost any time during the growing season, providing that it is done early enough to give the plants an opportunity to become well rooted before frost.

Though the Japanese Iris will do well if exposed to full sunlight, a situation in which there is some protection from the rays of the sun during the hottest part of the day, is more desirable. Once well established, the Japanese Iris will increase and bloom profusely, a strong clump oftentimes sending up from ten to twelve immense flower stalks, each crowned with a cluster of magnificent blossoms, each from five to six inches across.

By resetting the plants occasionally, and not permitting weeds and grass to encroach upon them, a bed of Iris *Kaempferi* will last a life time—a thing of beauty and a joy forever.”

BERTHA BERBERT-HAMMOND.

### Planting Hardy Irises.

It is recommended that soon after blooming time hardy Irises may be divided and reset to advantage. The well known German Iris, which some now call the Liberty Iris, are among the types which do well with early planting. If divided during July or August or early September, they become established and will give good bloom the next year after planting. A change in soil is beneficial for best results.

The Japanese Iris can also be divided and replanted as soon as the blooming season is over. This Iris especially, requires abundant moisture at the roots until after the flowering period. After it has flowered less water will answer and it must not have wet feet in winter. Transplanting should be done during moist weather and preferably on cloudy days.

Care must be exercised not to use fresh manure in the soil with the Iris as over-fertilizing may be fatal.

### Cypripedium reginae (Orchid Family.)

Common name, Showy Lady's-Slipper or Moccasin Flower.\*

In this section (Central New York) there are four varieties; the pink, the white, the yellow and the showy. The pink variety is the most common and the showy the rarest. In fact this variety is so rare that many lifelong nature students have never seen one growing. The habitat of the specimen photographed is known to only two or three persons. The place is kept secret



Showy Orchid (Lady's-Slipper). The rarest of our native orchids. Unique in that it has triple blooms instead of the usual single bloom.

because the owner is well aware that if it became generally known the orchids would soon be exterminated. The showy lady's-slipper grows in swampy situations, frequently actually in the water. The plants are from one to two feet in height, closely covered with alternate, elliptic, acutely pointed, coarsely ribbed leaves, from four to seven inches long. The sepals are round ovate in form, and white in color. The petals, which are somewhat smaller than the sepals, are also white. The inflated lip, or pouch, is white, variegated with purplish stripes. The blossoms are from three to three and one-half inches long, and are borne from one to three on a stalk.

\*We are indebted to Mr. Geo. W. Harris in charge of the Government Experiment Farm at Baldwinville, N.Y. for the photograph and description of the showy orchids.

There is still time to divide the Iris, Phlox, Peonies, and a large variety of hardy perennials. The Peony will do well undisturbed for from ten to twenty years, but most of the perennials require division as often as once in three years in order to do their best; and a few like the Shasta Daisy and Japanese Iris will actually die out if not divided as

often as every other year. In planting perennials, and also the bulbs above mentioned, it is always important to select a spot where water will not stand and freeze through the winter. So far as the ground is concerned, this is almost the only thing that they will not endure. All of them, without exception, will be improved by some slight covering or mulching over winter. This is not to keep them warm, but rather to keep them cold and prevent the sun from thawing too early in the spring.—CLARENCE WEDGE in *The Farmer*.

### Roses and Vegetables out of Season.

The profitable specialty of a New England man is Roses out of season. Originally the owner of greenhouses at Brighton near Boston, this man learned a thousand and one things about the successful culture and sale of roses. Then he bought land in Southern New Hampshire, close to a trunk railroad, and, knowing his ground, branched out. In a few years his shipments of Roses at Memorial Day time were 20,000 a day.

The first greenhouse built in New Hampshire was 800 by 50 feet and was devoted entirely to *American Beauty* Roses. This plant was outgrown in four years, and another greenhouse, 1,340 by 60 feet, was erected, giving 125,000 square feet under glass. Simultaneously a general farm was established, the manure from fifty Holsteins kept being largely used in the greenhouse. The farm force eventually numbered forty persons, some of them highly paid experts.

*American Beauties* were produced entirely for a number of years, when market demands led to the addition of four or five other varieties. The aim was to have the largest possible number of Roses for sale when the demand was greatest and prices highest, and in this the farm was singularly successful. Each year 30,000 plants were raised. There are numerous possibilities little appreciated by the average person in the production of flowers and vegetables for sale out of season. The most obvious means is the greenhouse, employed by the Rose specialist mentioned with such profitable results. In the Pacific Northwest is a market gardener who sells head lettuce from summer until after frosts, during which time he has practically no competition. Of an inventive turn, this man saw the possibilities in a combination of irrigation, which would enable him to grow lettuce through the dry summer months, and muslin frames, which would protect the lettuce from the hot sun, its greatest enemy, and later from frosts. He put his ideas into practice, experimented as much as was necessary, and made good.—J. T. B. in *Rural Life*.

### American Gladiolus Society.

Owing to lack of space no report is made in this issue of the annual meeting of the American Gladiolus Society, but we expect in the October issue to give a full report of the meeting including the president's address and the secretary's report. We have usually included the write-up of the flower show and the annual meeting under one report or article, but this month we are dividing it so as to enable us to give a more complete report of the annual meeting.

### Catalogues and Price Lists.

V. Lemoine & Son, Nancy, France. Catalogue and price list of Delphiniums and Peonies, seven pages, printed in English with prices. Brief descriptions are given of each variety.

The Oronogo Flower Gardens, Carthage, Mo.—An especially well gotten up catalogue and price list of Narcissi, Tulips and Irises, twelve pages.



## WAYSIDE RAMBLINGS

### GLADIOLI IN A DRY SEASON.

Last year we had practically no rain here from the 14th of June until Sept. 16th although there was plenty within ten miles of us on all sides. I planted my cheap varieties of Gladioli such as *Halley*, *Baron Joseph Hulot*, *Mrs. Francis King*, etc., on my high ground next to my potatoes. They were for the most part old corms  $1\frac{1}{2}$  in. to 2 in. in diameter. The ground dried out to a depth of ten inches. *Halley* bloomed but the rest did not. They all stopped growing about August 1st. My potatoes were a total loss. When digging I left this bunch of Gladioli until the last and they were not dug until after November 1st. I thought they would not be worth much. Imagine my surprise when I found nice round corms one inch in diameter just like young stock. There were very few bulblets but what there were were large. This year these bulbs are making strong growth with healthy dark green foliage and as good as I ever had from young stock.

D. E. NELSON.

### TIME FROM PLANTING TO BLOOMING OF GLADIOLI.

It is interesting to study the different tables that have been given in THE FLOWER GROWER showing the number of days from planting to the blooming of the different varieties of Gladioli. But the differences and discrepancies in the reports are somewhat disconcerting. Conditions are not alike in all the reports. Other things being equal, a corm planted in June will bloom in a less number of days than one planted in April. A number two corm will bloom later than a number one, and a half inch corm, if it blooms at all, will bloom many days later than either. Soil may make a difference. So may weather, and perhaps other things.

Even if we could have all things alike in these respects, there is another item in which all are equally at fault. Is there not something radically wrong in taking the first bloom of any one variety as a representative of its kind? Would not the last individual to bloom be just as fair a representative? Would not a middle point between the two be fairer? That would be the average time of the whole lot. If the number of days that first bloom opens before the average time were a fixed quantity, then the present custom might be all right; but is it a fixed quantity? Isn't that first bloom a sort of freak with nothing regular as to its time? Take ten plants, say of *America*. Say the first bloom opens x days before the average. Now take a lot of a thousand *Americas*. Will the first freak bloomer be x days before the average? More likely it will be twice that. And the larger the lot the longer before the average is the first bloom likely to be. Yet the *average* of the small lot is likely to be the same as that of the large lot.

With that sort of thing it is likely to happen that the man with a large lot of any kind will report it earlier than the man with the small lot, although it may happen the other way. Nothing definite about it.

It is generally understood that *Pink Beauty* is the earliest variety, with *Halley* a close second. But if a man has a small number of *Pink Beauty* and a big lot of *Halley*, very likely he will report *Halley* the earlier.

An old saying is: "Any fool can find fault; but the remedy, that's the thing." I'm not sure I know the remedy, but until some one offers something better I might offer a suggestion. Simply take the number of days from the time of planting until half the plants open their first bloom. To do this with a big lot would be something of a job. Well, then, count off a hundred, or some smaller number, and it will not be so very hard to tell when half of them have shown bloom.

The plan at present in vogue has the one advantage that it's easier, and if you prefer to use it I'll be magnanimous enough to grant you the privilege.

C. C. MILLER.

### BALTIMORE AND SALMON QUEEN.

*Salmon Queen* was selected from Groff's Hybrids and named *Salmon Queen* by Geo. S. Woodruff. The same variety was named *Baltimore* by Arthur Cowee several years later.

G. D. BLACK.

### Dutch Tulips.

It would doubtless surprise, and perhaps disappoint, many a lover of the Dutch Tulip, or "oignon à fleur," to learn that it was in a sense "made in Germany." It is on reliable record that the one variety of Tulip from which most of the celebrated varieties were obtained is the *Tulipa Gesneriana*, which Conrad Gesner, a German, brought in 1559 from Constantinople to Augsburg, whence it found its way to Holland. A ludicrous claim of Pan-Germanism, therefore, may yet be heard in which Holland is declared to be unmistakably Germany's by right of the bulb trade, unless Turkey should make a prior claim, or Persia, should sue the Dutch for using a Persian word with which to name the national flower. For "Tulip" is none other than the Persian "Toliban," meaning a turban.

The Tulip is cultivated in Holland more than any other flower not merely because of the wealth that lies in the industry, or the appropriateness of Dutch soil for producing the best flowers, but also because of the Dutch people's intense love of color. There were days, centuries ago, when the Tulip was the subject of frantic speculation, comparable only to the South Sea Bubble. A single bulb of the Tulip *L'Amiral Liefkenshoek* has sold for 4500 florins, and one a *Viceroy* for 4200 florins, while the *Semper Augustus* has brought as much as 13,000 florins. The speculation spread to England, where £100 was once paid for a single bulb of *Fanny Kemble*, whilst a poet wrote of the

fashionable flower in those ingenuous couplets:

For brilliant tints to charm the eye,  
What plant can with the Tulip vie?  
Yet no delicious scent it yields  
To cheer the garden or the fields;  
Vainly in gaudy colors drest,  
'Tis rather gazed on than caressed.

The inflated prices, however, did not last. The Dutch Government stepped in and brought Mynheer back to his senses. The speculation was followed by the inevitable crash, and now the Dutch grower cultivates the flower content to make a reasonable profit without any of the visionary's hopes of producing the unique, the priceless Black Tulip, that "Philosopher's stone" in Tulipdom, the attainment of which, as every reader of Alexandre Dumas knows, was the subject of the feud between Cornelius Van Baerle and Boxtel in the stirring days of the Brothers de Witt.

The known cultivated varieties of the Dutch bulb number nearly 2000. Haarlem, or the district of Hillegom-Haarlem, the bulb nursery-garden of the world, is a feast of color at blooming time of the year. Acres upon acres are covered with Tulips in full bloom, while the quays are sure to be lined with barges converted for the nonce into floating flower-shops. To the onlooker, the coloring is bewildering, but the growers are able instantly to identify the flowers by a simple and well-understood method of classification. There are the "selfs," or flowers of one solid color, and the "Bizarres," "Roses" and "Bybloemen," which for the connoisseur signify definite colorings, shadings, and markings. Then there are the plants known as offsets and seedling Tulips. The offsets grow to a flowering size in three or four years; the seedling Tulips after four or five years. But there is this remarkable feature about the latter, that whatever may have been the colorings and markings of the flowers from which the seeds were taken, the first flowers are of one dull, plain color. They continue in this uncertain condition for several years. Then the time comes when they break into brilliant colors, and display those markings which are classified as "flamed," or "feathered." But nobody is certain as to when the exciting period of "breaking" will occur, though all kinds of ingenious devices are resorted to in order to hasten this stage. Once it is reached, there is always a prospect of unexpected markings appearing. A moment of tense expectancy has arrived for the modern grower. Let the markings but reveal that a hitherto unknown variety of Tulip has been produced, and his cup of happiness is filled to the brim.—*Christian Science Monitor*.

### Gladiolus—Prince of Wales.

Here is what one of our subscribers says about the new variety, *Prince of Wales*:

"I cannot begin to express to you our appreciation of the glorious spikes of *Prince of Wales* we have been cutting for the past two weeks. It has *Halley* backed off the map as an early variety in that shade. Each spike is a big bouquet in itself and the percentage of crooked stems is just right."

Those who are especially struck with the variety *Halley* should try a few *Prince of Wales* in comparison. It is by many considered superior to *Halley* in every way.

Reports from nearly all growers in various parts of the country indicate that the cut flower season has been a most unsatisfactory one, the extreme heat at times forcing the bloom and resulting in a very inferior cut.

## The Glad Philosopher's Musings.

The writer knows a man who owns a garden and aspires to grow fine flowers therein, but satisfactory results do not often follow his efforts. Indeed, as a failure, this man's garden is about the greatest success I know of! He loves flowers, and plants ungrudgingly to get them, but an unexpected trouble generally develops or some calamity befalls, due, of course, to his own negligence or misdirected effort, and consequently he has to ever offer apologies and make excuses. Would you know the principal cause of this man's failure? Let me tell you: He never made any attempt to learn the how and the why; he has never read a single one of the many books on floriculture; he takes no paper or magazine devoted to gardening; he does not even consult the directions furnished in the catalogues by those who speak from knowledge gained through years of experience, and it would be a prodigal waste of time for anybody to attempt to tell him anything, for he assumes to already know—better than the wisest and most learned—how to do everything; blindfolded, a phrenologist might easily mistake his bump of self-esteem for a goose egg or a cocoanut.

I said this man loves flowers. He does—when they are his own flowers. If you show him an exceptionally choice specimen bloom that you had taken great pains to produce and are justly proud of, his comment usually is, "you ought to have seen the one I got the other day, it was twice as large as that." A visit to his garden reveals most conspicuously an abundant crop of vigorously growing weeds, but they do not embarrass him; he only regrets he hasn't had the time to exterminate them; he does not discover the mildew on his rose plants; he wishes he knew what to do to eradicate the insect pests that infest them; he laments the damage done by the recent drouth; he is sorry you did not call last week when his flowers were at their best; he hopes to have better luck next year, etc., etc.

I believe I told you that I know this man. Yes, I do, and you know him, too; he and his garden abide in every community.

In happy contradistinction to the man's garden which proclaims its owner's inefficiency is the one of a woman of whom it is said, "everything she sticks into the ground grows and thrives." Her garden is truly a "thing of beauty and a joy forever." Its fame is known far and wide, and slips from her plants have started numerous colonies of similar kinds in gardens of many of her acquaintances. When neighbors call she takes them out to see her garden and loads them down with her choicest blooms, bestowing them with lavish hand and open heart, for she knows that the more she cuts the more will come. On festal occasions her generosity is appealed to, and never fails to respond.

Her flowers cheer the sick, and attest the consolation of a sympathizing heart for friends bereft of loved ones. Is it any wonder that they thrive and blossom so profusely for her?

Like the man I know, this woman may never have read a book on floriculture nor taken a magazine devoted to the science of gardening. She doesn't need to, for she is a born gardener—she has the inherent knack. Flowers are in her heart as well as in her garden. You doubtless know her also, for she, too, lives in your community.

When daughter practices her music lesson—how sweet the strains! When our neighbor's child practices hers—what discord! When our baby cries—how it awakens our sympathy; when neighbor's baby cries—how it annoys. Let us then condone the weakness in our friend's nature that causes him to see more beauty in his own flowers than in ours. The universality of the habit makes it a human trait.

### THE GLAD PHILOSOPHER.

## The American Gladiolus Society.

[Continued from page 92.]

- |                                 | 1st  | 2nd  |   |
|---------------------------------|------|------|---|
| No. 68—                         | 5.00 | 3.00 | Vase 10 spikes <i>Primulinus Hybrids</i> , Yellow. First won by Madison Cooper. Second by O. C. Curtis. |
| No. 69—                         | 5.00 | 3.00 | Vase 10 spikes <i>Primulinus Hybrids</i> , any other color. First won by Madison Cooper.                |
| No. 70—                         | 5.00 | 3.00 | Vase 12 spikes <i>America</i> .   |
| No. 71—                         | 5.00 | 3.00 | Vase 12 spikes <i>Mrs. Frank Pendleton</i> .  |
| T. A. Havemeyer, New York, N.Y. |      |      |   |
| No. 72—                         | 5.00 | 3.00 | Vase 12 spikes, White, one variety.   |
| No. 73—                         | 5.00 | 3.00 | Vase 12 spikes, Pink, one variety. First won by Madison Cooper.   |
| No. 74—                         | 5.00 | 3.00 | Vase 12 spikes, Red or Crimson, one variety. First won by Madison Cooper.                               |
| No. 75—                         | 5.00 | 3.00 | Vase 12 spikes, Yellow, one variety. First won by Madison Cooper.                                       |
| No. 76—                         | 5.00 | 3.00 | Vase 12 spikes, Blue, Purple or Lavender, one variety. First won by Madison Cooper.                     |
| No. 77—                         | 5.00 | 3.00 | Vase 12 spikes, any other color, one variety. First won by Madison Cooper.                              |

### Arthur Cowee, Berlin, N.Y.

- |         |       |   |  |
|---------|-------|---|--|
| No. 78— | 5.00  | — | Best vase 25 spikes <i>Peace</i> .                           |
| No. 79— | 5.00  | — | Best vase 6 spikes <i>Peachblow</i> .                        |
| No. 80— | 5.00  | — | Best vase 6 spikes <i>Papilo Rose</i> .                      |
| No. 81— | 5.00  | — | Best vase 6 spikes <i>Dawn</i> (Gross).                      |
| No. 82— | 10.00 | — | Best vase 6 spikes <i>Afterglow</i> .                        |
| No. 83— | 10.00 | — | Best vase 1 spike each of <i>War, Peace and Prosperity</i> . |

### H. E. Meader, Dover, N. H.

- |         |               |  |
|---------|---------------|--|
| No. 84— | Best 6 spikes | <i>Myrtle</i> . First prize cut glass vase valued at \$5, won by Madison Cooper; second prize, 20 corms of <i>Myrtle</i> ; third prize, 10 corms <i>Myrtle</i> ; fourth prize, 5 corms <i>Myrtle</i> . |
|---------|---------------|--|

### The Henry F. Michell Co., Phila., Pa.

- |         |   |
|---------|---|
| No. 85— | Best 6 spikes, all different, one vase, comprising the best display and most harmonious color combination, no preference being given to named varieties. First prize, Michell Silver Medal, won by Madison Cooper. Second prize, Michell Bronze Medal, won by Mrs. H. H. Boyce. |
|---------|---|

### P. W. Popp, Mamaroneck, N.Y.

- |         |  |
|---------|--|
| No. 86— | Best 6 vases, 6 varieties, one spike each, predominating color Blue, Purple, Lavender or Mauve. First prize, \$3.00, won by Madison Cooper. Second prize, \$2.00, won by Mrs. H. H. Boyce. |
|---------|--|

### THE FLOWER GROWER, Calcium, N.Y.

- |         |   |
|---------|---|
| No. 87— | For the best display of Gladioli consisting of not less than 10 spikes nor more than 20 spikes. Not more than 3 spikes of any one variety. No preference to be given to named varieties. First prize, a life subscription to THE FLOWER GROWER, won by Geo. Messing, Buffalo, N. Y. Second prize, a five-year subscription to THE FLOWER GROWER, won by H. E. Chriswell. Third prize, a two-year subscription to THE FLOWER GROWER. |
|---------|---|

### Garden Magazine, Garden City, N.Y.

No. 88—The Garden Magazine Achievement Medal for the finest quality of bloom shown in Classes 51 to 100, exhibitors showing less than 25 spikes not to be considered, won by Madison Cooper.

### A. E. Kunderd, Goshen, Ind.

Offers in each of the following classes bulbs to value of the prizes set forth for each class:

- |         | 1st   | 2nd    |  |
|---------|---|--------|--|
| No. 89— | \$3.00  | \$2.00 | Best 3 spikes <i>Myrtle</i> . First won by Madison Cooper. Second won by O. C. Curtis. |
| No. 90— | 3.00  | 2.00   | Best 3 spikes <i>Purple Glory</i> , won by Madison Cooper.                             |
| No. 91— | 3.00  | 2.00   | Best 3 spikes <i>Mrs. F. Pendleton</i> . Second won by C. W. Clapp.                    |
| No. 92— | 3.00  | 2.00   | Best 3 spikes <i>Alice Tiplady</i>   |
| No. 93— | 3.00  | 2.00   | Best 3 spikes <i>Lilywhite</i> .   |
| No. 94— | 3.00  | 2.00   | Best 3 spikes <i>Kunderd's Glory</i> .   |
| No. 95— | 3.00  | 2.00   | Best 3 spikes <i>Pride of Goshen</i> . First won by C. W. Clapp.                       |
| No. 96— | 3.00  | 2.00   | Best 3 spikes <i>Mrs. A. E. Kunderd</i> .  |
| No. 97— | 3.00  | 2.00   | Best 3 spikes <i>Rose Glory</i> , won by Madison Cooper.                               |
| No. 98— | 3.00  | 2.00   | Best 3 spikes <i>Youell's Favorite</i> .   |
| No. 99— | Best display of Kunderd's varieties not less than 10 spikes nor more than 15 spikes. First prize \$6.00, won by H. E. Chriswell. Second prize \$4.00. Third prize \$2.00. All prizes to be paid in stock. |        |  |

Award of Merit to the Austin-Coleman Co., Wayland, Ohio, for three seedlings pure white, orange and shell pink.

Award of Merit to The Grullmans Co. for general display of high quality stock.

Award of Merit to John Sheepers & Co. for display and arrangement of excellent stock.

Award of Merit to C. Zeestraten for general display of fine stock.

Award of Merit to W. E. Kirchhoff, Pembroke, N. Y., for general display and quality. This exhibit was well staged by W. J. Palmer & Son, one of Buffalo's leading florists.

Honorable mention of vase of five spikes *Gladiolus Dracecephalus* which promises to be valuable for future hybridization, exhibited by Madison Cooper.

Special mention made by the judges of the high quality of the *Primulinus Hybrids* shown, which illustrated the remarkable advance which has recently been made in this class.

## Flowers Just the Same.

Last year the lawn of a beautiful home was plowed up and the lot put into garden. Instead of a lovely green sward, bare stakes stood up like porcupine quills, ready to receive the beans and tomatoes which were afterwards trained on them.

Doubtless this was an act of sacrifice and patriotism, but we believe the country is going to need flowers as well as vegetables, and the true flower lover will find place for her flowers just the same as in pre-war years. *The American Florist* says truly:

"Flowers are a necessity to a people. There is a limit to human strength and endurance, and the relaxation that comes to the mind by having flowers in the home, garden or hospital is a thing of reality to those who know and love flowers. Here in America we are not yet fully acquainted with casualty lists, and when they come as we fear they will, flowers will express to the mother what words cannot express. 'How France Honors Her Dead' was the title of a picture of a French war grave, published in the Red Cross magazine, and the mass of flowers told the story that flowers carry the last message to those who have gone beyond. Our mail today brought a letter from a French florist, telling of the shortage of rose plants in France, due not to the war causing less production, but because the war is making roses a necessity to those who sorrow."

When one is in sorrow, and everything loved seems slipping away, the perennial flowers, as the fixed stars, seem something to tie to, and so bring comfort.—*Wallace's Farmer*.

During a bad flower season like the one just past the varieties of Gladioli are difficult to judge. Some of the very best varieties at times have behaved poorly this year. Few varieties, indeed, will show up well under all weather conditions.

**Gladiolus Publications Available.**

We have just learned that the Division of Publications at Cornell University, Ithaca, N. Y., still has available a supply of Extension Bulletins Nos. 9, 10 and 11, known as Gladiolus Studies I, II and III which may be had without cost. These bulletins were reviewed in THE FLOWER GROWER for April, May and August, 1918.

Bulletin No. 9 treats of Botany, History and Evolution of the Gladiolus by Dr. A. C. Beal. Bulletin No. 10 treats of Culture and Hybridization of the Gladiolus and this is by Prof. Alfred C. Hottes. Bulletin No. 11 treats of Varieties of the Garden Gladiolus and this also is by Prof. Hottes. The series of three bulletins comprises over 450 pages and can be made into a bound volume to good advantage.

For the present or as long as the supply lasts, these will be sent on request to anyone within the United States as we understand it, and we strongly urge that those who are interested in studying the finer points of Gladiolus history and culture should secure them at once. There is no expense except the mere writing of post card to M. V. Atwood, Assistant in Charge of Publications, Cornell University, Ithaca, N. Y.

**A Marking Tag for Gladioli.**

In a recent issue of THE FLOWER GROWER I have read with great interest what Mrs. Austin says about marking with stakes to identify Gladioli at harvesting time. I have tried all kinds of tags and labels and found that when it came time to dig the bulbs, the labels were so obscure that they were no good, but I find that pin tags, (the ordinary tags used in the drygoods stores) fill the bill nicely. When cutting the flower spike, stick the pin through the stalk four or five inches from the ground. It does not harm the growth of the plant and as the tag can be written on with a pencil and as the tag is perpendicular, the rain will not affect the writing.

These tags are also useful to stick in the bottom of any special bulb for shipping, and the small pins do not injure the bulb in any way. These tags can be had at a cost of 65c. to 85c. per thousand.

FRANKLIN BENNER.

Requests for information about selling cut flowers come to hand from time to time and those who are able to find a market for their surplus flowers should let us have their experience.

**FORCING BULBS. Gladiolus.**

A No. 1 size **America, Francis King and Chicago White** well ripened bulbs for forcing. If interested write for prices.

**E. T. FLANAGAN, San Gabriel, California**  
Route 2, Box 325

The crop of Gladiolus corns this year is not going to be an extra good one. Those who have fine stock should find a ready sale for it.

**CLASSIFIED ADVERTISING.**

*Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.*

**W. E. KIRCHHOFF CO.**, Pembroke, N.Y., growers of the finest Gladioli, such as Pendleton, Panama, Niagara, Pink Perfection, Europa, Mrs. Fryer, War, Peace, etc. Correspondence solicited.

**MUNSELL & HARVEY**, Ashtabula, Ohio, growers of **GLADIOLI** and **PEONIES**. Would appreciate your order for Peony roots for fall delivery, at least the request for a price list.

**ONE DOLLAR** will bring to your door 20 fine Iris roots, at least six kinds, all good, and including the giant flowering *Pallida*, worth alone 15c. each. Light yellow—*Flavescens*, yellow and brown—*Idion*, Velveten, purple, 6c. each, any number.  
**PAUL WARD**, Plantsman, Hillsdale, Mich.

**MYRTLE**, the finest early pink Glad., \$8.00 per 100, post paid. Pendleton, Pink Perfection and Gov. Hanly, 80c. dozen. All full-size, healthy bulbs.  
**N. W. TALBOTT, R. 1, Lyons, Colo.**

**HENRY C. ECKERT**  
Grower of  
**GLADIOLI and IRISES**  
No Catalogue. Write what you want.  
**BELLEVILLE - - ILLINOIS**

**Colorado Grown Bulbs & Seed**  
Specialize on  
**Dahlias, Cannas, Gladioli**  
**H. E. Mason, - - Rocky Ford, Colo.**

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401 South Clay St. Sturgis, Mich.

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We are offering Planting Sizes and Bulblets of several desirable varieties. We specialize in the choice American and French varieties. *Catalogue on request.*  
**Bath, N.Y.**

**GLADIOLI**  
Send for my catalog, containing 125 distinct varieties, four special offers and some excellent mixtures, TODAY—IT IS FREE.  
**JELLE ROOS**  
DEPT D. MILTON, MASS.

**Derby Gardens Gladioli**  
LIST ON APPLICATION.  
WHOLESALE. RETAIL.  
**John H. Umpleby, Lake View, N.Y.**

**GLADIOLI**  
Booklet giving valuable culture directions free  
**CEDAR ACRES**  
B. HAMMOND TRACY, Box 27, Wenham, Mass.

**U. Lemoine & Son**  
Nurserymen, Nancy, France  
**GLADIOLI**  
**Lemoinei and Nanceianus**  
Catalogue, printed in English, on application.

**W. F. SHEARER**  
**Gladiolus Grower**  
504 South College St. Angola, Ind.

**Vaughan's Seed Store**  
CHICAGO NEW YORK  
Importers and Growers of all Bulbs  
*CATALOG and SPECIAL PRICES FREE*  
Our deliveries of Dutch Bulbs last year was a remarkable record of prompt and accurate handling.

**GLEN P. HOWARD**  
**IOWA GROWN**  
**GLADIOLI**  
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**TULIPS, NARCISSI, PEONIES, IRISES.**  
Many Varieties. Send for Price List.  
Special Offers:  
TULIPS—MIXED MAY-FLOWERING ..... \$1.60  
" MIXED PARROT ..... 1.60  
" MIXED DARWIN ..... 2.00  
NARCISSI—PHEASANT'S EYE, late poeticus ..... 1.40  
" BIFLORUS, primrose-white ..... 1.40  
" BARRII Conspicuous, yellow ..... 1.80  
" GRANDIFLORUS, early poeticus ..... 2.40  
Price is per 100, postage paid. 25 of a kind at 100 rate, provided order totals 100 or more. Order now, and make sure of your supply.  
PEONIES: 20, all different, \$2.50, postage paid.  
IRISES: 12, all different, \$1.00, postage paid.  
SIBERIAN IRISES: 4 colors, 50c., postage paid.  
These collections cannot be divided.  
**Oronogo Flower Gardens, - Carthage, Mo.**

HAVE YOU NOTICED THE BEAUTIFUL "AMERICAN BEAUTY" TINT AND THE UPRIGHT STRONG GROWTH OF  
**Gladiolus "MRS. WATT"**  
WRITE FOR 1919 PRICES—BULBS AND PLANTING STOCK  
**Homer F. Chase**  
Grower of Gladioli  
Wilton - - New Hampshire

**WILDFLOWERS** The haunts, habits and uses of our native plants, their behavior under cultivation, and the origination of new forms by sports and hybridizing is the special field of **THE AMERICAN BOTANIST** \$1.25 a year  
SAMPLE FREE 23 VOLUMES ISSUED  
Willard N. Clute & Co., Joliet, Ill.

## I am Growing Gladioli

of the best varieties and mixtures. My bulbs are all planted for this season and doing well but I shall be pleased to talk with you about "Glads." for next fall or spring, either wholesale or retail.

Geo. S. Woodruff, Independence, Iowa

## Metzner's Gladioli

**GRAND PRIZE STRAIN**

A CALIFORNIA CREATION—FULL OF LIFE AND BEAUTY.

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Seed from the world's finest varieties 50c per packet. Delivery after Nov. 1st.

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Flowerfield, L. I.

## EARL EDGERTON

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## RICHARD DIENER CO. INC.

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## GLADIOLUS

IN THE WORLD.

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## BOUND VOLUMES FOR SALE

Complete bound copies of **The Modern Gladiolus Grower** of volumes I, II, III and IV with indexes are now available. They aggregate about 725 pages and contain the most complete information on Gladiolus growing to be had anywhere. Mailed to any address postpaid \$1.25 per volume or \$5.00 for the four.

**MADISON COOPER, Publisher,** - - - **Calcium, N.Y.**

## Owing to the high percentage of germination

of my bulblets, I shall have a large stock of planting stock of the following Gladioli: Panama, Halley, Prince of Wales, Niagara, Glory of Holland, Pendleton, Schwaben, Empress of India, Sulphur Queen, America, War, in size from 1½" and less.

My Price List will be ready in a few days and will be mailed on request and include other varieties as Ida Van, Clear Eye, Burrell, Crystal White, Pink Progression, Rouge Torch, Glory, Peace, Azure, Blue Jay, etc.

**John Zeestraten, Mansfield, Mass.**

## MUST MOVE surplus stock of IRIS

Write for low prices on quantity you can use.

**Pallida Dal., Kharput,  
Flavescens, Princess of Wales,  
Madam Chereau,  
Florentina Alba.**

### Plant Now

FINE CLUMPS FOR FLOWERS NEXT SPRING

One each of above six choice varieties  
by express for only \$1.00

**Brookland Gardens  
Choice Gladioli**

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The World's Choicest

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Including all the New and Rare Varieties

LeCygne, Solange, Therese, La France, Martha Bulloch, Tourangelee, Mme. Jules Dessert, Primevere, Rosa Bonheur, M. M. Cahuzac, Lovelines, Enchanteresse, Jubilee, etc. Send for catalogue. Now ready.

**D. W. C. RUFF** - - - **Globe Bldg., St. Paul, Minn.**

If you are a professional, or amateur grower, you will find the columns of

## THE GARDENERS' CHRONICLE (OF AMERICA)

brimful of helpful knowledge on plant culture—based on scientific and practical experiences. In addition to its contributed articles by well-known authorities on horticultural subjects, digests of the leading topics appearing in American and European horticultural journals are published regularly making the Gardeners' Chronicle

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## Quality Gladiolus Bulbs

We are having a fine growing season and expect to harvest a large crop of many of the best varieties.

WHOLESALE AND RETAIL

Which list do you want?

**G. D. BLACK**

Albert Lea,

Minnesota

# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 10

October  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

Entered as second-class matter March 31, 1914, at post office at  
Calcium, N.Y., under act of March 3, 1879.

PUBLISHED MONTHLY ON THE FIRST OF THE  
MONTH BY MADISON COOPER, CALCIUM, N. Y.

Subscription price: Three years, \$2.00; One year, \$1.00.

### Winter Storage of Summer Blooming Bulbs.

[Written expressly for *The Flower Grower*.]

BY BERTHA BERBERT-HAMMOND.

"Dry, wrinkled ill-looking thing  
Lifeless roots around you cling  
Beauty seems gone forever.  
Ugly, ill-shapen and bare  
Brown and shriveled, shall I ever  
See you again so fair?"

—[Annie C. Shaw.]

following concise and simple directions, as to the proper winter treatment for some of the popular summer blooming bulbs and tubers if

carefully followed should result in success.

Probably the most deservedly popular and widely grown of the summer

bulbs are the improved varieties of Gladioli. In the autumn when these bulbs are ripe enough to harvest, lift the plants, allow them to dry in the sun for several hours, then cut the tops off close to the bulbs. When dry, a small collection may be placed in paper bags and hung from the ceiling of a cool but frost-proof cellar or buried in boxes of dry sand. A large number of the bulbs or corms may be more easily and economically cared for by storing in shallow crates in such a manner that the air may have access to the corms, keeping them cool and dry and preventing their premature sprouting or decay. The small bulb-lets or cormels that are usually found attached to the parent corm when it is dug should be removed and hung up in paper sacks or they may be stored in clean, moist sand. In the spring peel off the hard outer covering and plant these cormels about four or five inches apart covering them with two inches of sandy soil. The bulb-lets may bloom the second year, but will probably not be at their best until the third or fourth season.

The tubers of the Dahlia (perhaps the second flower in popularity) are not difficult to winter. After the tops have been first killed, lift the clumps carefully



GLADIOLUS—E. J. SHAYLOR.

Originated by A. E. Kunderd, Goshen, Ind., and introduced through his 1918 catalogue.

It was named by the originator, for Mr. E. J. Shaylor, of Auburndale, Mass., who has done so much for Peony growing in America.

It is a tall vigorous grower and has large blooms of a beautiful pure deep rose color. Has a large number of blooms open at one time.

Gladiolus *E. J. Shaylor* is a rapid multiplier and makes a splendid growth of foliage. It is distinct in appearance and always attracts the attention of visitors at the field. Mr. Kunderd expects it to become popular when it is well known.

from the ground and allow them to dry in the sun for an hour or two, then cut off the old stalks, leaving three or four inches above the clump. When digging Dahlia tubers, it is of the utmost importance not to mutilate the neck which connects the tuber to the stalk, as to break this connection renders the tuber valueless. If the air in the storage room is dry, pack the clumps in boxes and cover with sand to keep them from drying out. In a damp cellar the tubers might mould or decay if placed directly on the floor; but would probably keep quite well if stored on hanging shelves. Any cellar with the conditions requisite for keeping potatoes would prove ideal for the winter storage of Dahlia tubers. Keep in mind the fact, that as the sprouts usually appear at the base of the stem, it is essential to keep that portion of the clump in perfect condition. If the dormant sprouts or eyes are allowed to freeze or become mouldy, the clump will fail to produce plants even though the individual tubers seem in good condition. To assure success do not divide Dahlia clumps until they have thrown out sprouts in the spring.

The method suggested for wintering Dahlias may be used also for the storage of Canna roots, though as Cannas are more likely to dry out or rot, these roots require additional care and attention. Canna roots should be dug as soon as the foliage is nipped by frost. Allow whatever soil that adheres to remain; cut off the foliage and store the roots in boxes or on shelves. During the winter examine the roots occasionally. If they appear to be drying out moisten them slightly; if they show any signs of decay, remove them to a place that is more dry. In the South, when the climate is mild, Cannas may be placed in piles on boards, covered with earth and left out of doors for the winter.

The bulbs of Caladiums (Elephant's Ears) another class of ornamental foliage plants, should be lifted and dried off in October and stored in dry sand in a warm, dry place. In the spring, if they are planted out in masses, in a shady, moist situation the showy, luxuriant foliage will produce an effect that is rich and tropical.

If one has only a few Caladiums or Cannas to winter, they may be planted in pots, placed in a warm room and watered sparingly to prevent the drying out of the roots.

The large flowered strains of tuberous rooted Begonias are so exceptionally beautiful and so quickly grown, that it is rather surprising that they are not better known. As most of these bulbs were grown for the trade by Belgian florists, the supply from that source is small and the bulbs in this country are doubly worthy of the care necessary for their preservation. The method of wintering them, though different from those previously given, is not difficult. If the Begonias are bedded out, the tubers should be lifted in the autumn, dried off, packed in dry sand or sawdust (or wrapped separately in paper) and stored in a frost-proof place. If the Begonias are in

pots the tubers may be removed and treated as above or they may be left in the pots. In the latter case withhold water until the soil in the pots is thoroughly dry. When the tops of the plants dry off, fill the pots to the brim with a layer of coarse, sharp, dry sand and set away in a place where the temperature will not fall below 50°.

To start the growth of the tuberous roots in the spring, simply remove the layer of sand from the top of the pot, and begin watering. Keep in a dark, warm place until there is root growth, then bring to light and warmth.

The highly perfumed tuberose which was the pride and delight of our grandmothers, seems to have lost favor. One rarely finds this beautiful, chaste flower in the modern garden. Perhaps the close association of this heavy-scented, waxy flower with funerals, may account, in part, for its wane in popularity, but a few of these late blooming plants for cutting and to beautify and perfume the garden in the fall when there is a dearth of flowers will be found a decided acquisition.

The bulbs of the tuberose should be lifted as soon as cold weather approaches, thoroughly dried, packed in boxes between layers of cotton and placed in a moderately warm, dry closet. In the spring divide the clumps and set out about five inches deep in a sandy, sunny situation. A mulch of stable litter applied during the hot, dry weather will materially increase the production of flowers. Bulbs that are set out before the ground is warm in the spring or that are left out too late in autumn, or that were stored in a cold, moist place, may fail to bloom because these adverse conditions have impaired the vitality of the tender flower germs.

The pretty summer blooming Oxalis, so frequently and effectively employed as an edging plant, has endeared itself to many flower-lovers. In the south the bulbous Oxalis is hardy and may be left in the ground, but in the north after the plants have ceased to bloom and have completed their growth, the bulbs should be dried off and stored in a cool, dry place. The clumps of such species as *Oxalis hirta rosea* should not be divided when lifted as the large central tuber continues to contribute nourishment to the small bulbs clustered about it until dry. When resetting the small bulbs, plant them separately in rich soil along the edge of a bed or border and a low unbroken edging will result. *Oxalis Bowiei* and *Oxalis lasiandra* are also effective as edging plants. A number of these small but free-blooming bulbs planted three or four inches apart, quickly produce a dense border of beautiful foliage dotted profusely with clusters of dainty flowers which, on their long, slender stems, seem to nod and say as one passes by:

"Do you see this pretty flower  
Looking gay  
By the way?  
Though it shines in no fair bower  
Like a ray  
Day by day  
It just keeps on blooming there  
And with perfume fills the air  
And the passers-by all love it,  
So they say."

—Irma B. Mathews.

Note by the Editor—

We cannot agree with Mrs. Hammond's suggestion to leave tops on Gladioli for several hours after digging. There is no good reason for leaving the tops on Gladioli after digging. It is much more convenient to cut them off as fast as they are pulled out of the ground and this is standard practice among the commercial growers.

## Newport Hort. Society Show.

MUSIC HALL, AUG. 27, 1918.

In keeping with the general trend of economy the Society did not plan as extensive a fall show as usual. Many estates in this section have been very short of help so that the flowers could not be given the usual care and they have also patriotically given their time to the growing of vegetables instead. Then at the time of the show many were too busy to spare the necessary time to prepare and arrange the exhibits. However, the smallness of the show was made up by the enthusiasm of those exhibiting and the quality of the flowers and vegetables shown.

The childrens' garden exhibits were the center of attraction during the afternoon and there were a happy crowd of youngsters in the late afternoon when Secretary Webber distributed over \$100.00 among them for the awards made earlier in the day.

On the regular schedule, Mrs. T. O. Richardson, Jas. Robertson, gardener, was awarded first for the best specimen *Kentia* in a tub, and first for a specimen Palm.

On Gladioli, Mrs. C. B. Judge, M. Noonan, gardener, was given first for 10 spikes of Red, showing *Mrs. Francis King*.

For 10 spikes of White, C. W. Brown & Son was awarded first, showing *Europa*. Class of 10 spikes of Pink was won by C. W. Brown & Son, showing *Wm. Falconer*. The above firm also took first for 10 Yellow with their much advertised *Mongolian*. The class of 10 spikes any other color was won by Fred P. Webber with *Herada*. Mr. Webber also won the class for 25 *Primulinus Hybrids*. The silver medal for Commercial collection was won by C. W. Brown & Son.

Miss Fannie Foster was given a Bronze Medal for a collection of seedlings and was given a Certificate of Merit for Seedling No. 1.

C. W. Brown & Son also showed several vases of their seedlings and were given a First Class Certificate of Merit on their new seedling to be named *Goldfinch*.

Mrs. T. O. Richardson was given 1st on display of Dahlias.

A beautiful vase of *Sulphurea* shown by Fred P. Webber was given a "special" and a display of Collarette Dahlias by the same exhibitor also received a "special."

A beautiful vase of *Gardenias* shown by Hon. R. S. Breckman, Esq., J. O. Urquhart, gardener, received first in that class.

In fruit and vegetables the ladies demonstrated that they were up to the times by winning several prizes from the more experienced gardeners.

C. W. BROWN.

MRS. AUSTIN'S TALKS

[Written expressly for The Flower Grower.]

The Gladiolus and Its Message.

Buffalo	Buffalo
14	18
Keep it up	Keep it up
Buffalo	Buffalo
16	20
Keep it up	Keep it up



who were sure to add them to their gardens when they had once seen their beauty. Among the most noticeable were *Golden Measure*, a solid yellow; *Muriel* and *Badenia*, two good blues, a color so hard to find in Gladioli; *Violet*, a pretty thing; *Sunrise*, an extra early yellow; *Victoria Elizabeth*, a new belle in Flower-

I was reading the signs guiding us into the city of Buffalo, but breathing the words: "O, what a pity," and, "Why didn't they grow at least a few," for we had just passed the community gardens of the employees of the great Steel Co. Acres of gardens and in all those plantings not one flower to be seen. The gardens were in good growing condition, apparently well cared for, and perhaps I ought not to say there were no flowers because there may have been some, but in a searching look over the field I failed to discover any. A little farther on and nearer the Steel Works were (it seemed to me) almost endless rows of small tenement houses, much the appearance of this diagram. No neat



yards, and very little grass, the ground being bare in places. Children were there and I wondered if they had ever seen a flower. Going on we were stopped at the Jack-knife Bridge which was open to allow the passing of a steamer, and while waiting were privileged to see the largest fresh-water boat in the world, from whose cavernous depths thousands of tons of ore were being unloaded.

The Gladiolus Show was held in Hotel Iroquois, and at the entrance to the exhibit my first impression was one of the rich gorgeousness of color, possibly because my eyes first rested on that beautiful glowing scarlet, *Chautauqua Red*, which I recognized immediately having seen it in 1917 in the garden where it originated. Other richly colored ones were welcoming us, while more delicate beauties beckoned and drew us onward.

Favorites, that have stood the test of time, *America*, *Niagara*, *Panama*, *Schwaben*, *Europa*, *Lily Lehmann*, *Pink Perfection*, *Peace*, *War*, *Mrs. Frank Pendleton* were in profusion where only a few years ago they were a rarity, and newer ones were on the judges platform. The grower of seedlings is never satisfied, always trying for something new that is an improvement over the old. This was manifested in nearly every exhibit by blooms of rare shades, and large size or unusual forms. Beautiful seedlings were there that had not yet received names and were shown under number. Others there to become better acquainted with people

dom; *Evelyn Kirtland*, to whom I slipped a word of approval for wearing (in one of the exhibits) her divided spike; *Purple Glory*, a glory indeed; *Mrs. Dr. Norton*, *Cardisun*, *Grechen Zang* and other comparatively recent originations. All worthy productions, but with the knowledge gained from experience, the hybridist has a brighter outlook for the further improvement of this wonderful flower. The grandchild of *Golden Measure* will be tinted a deeper gold. The new *Badenia* will possess the lovely coloring of the present *Badenia* but a stronger growth. The New Blues will be of large size and various shades. How small my prophecy! For I am sure the Gladiolus of the future will be far in advance of anything we can now imagine.

We arose early the next morning and although the flowers were still concealed, I drew the curtains softly apart, then forgetting that the opening hour had not arrived, that we were in a hurry, that the auto was waiting, I entered the room, and the same emotions swept over me that I had experienced twenty, yes, thirty years ago, when in early morn I opened the wide door in the old home at Elm Hill Farm and beheld the beautiful blooms sparkling with dew in the morning sunlight. There had been no thought of commercialism then. I loved them for themselves and wished everyone could have a bit of the joy that comes from the study and cultivation of one of Nature's gifts of beauty. A refreshment for the soul.

As I stood among the flowers I thought of those children of the tenements and understood. The absence of flowers was not an indication that they did not care for them or had been especially deprived of them, but because flowers had not been brought to their attention, had not become awakened to their need of betterment, for even the lowliest home may have the brightness of flowers.

When attending a Gladiolus Show in Chicago several years ago, we stopped at the stand (a box) of a newsboy, and as the little fellow reached under for the paper we saw a small bunch of flowers. He craved something beautiful in contrast to the bleakness of the street.

The following letter given me by the mother of a soldier bears a message to all Gladiolus growers:

DEAR MOTHER—  
The box of beautiful Gladioli received, and after

traveling a distance of 400 miles or more, arrived the very best condition. You will never know how much good they are doing as I have divided them with the other boys in my ward (boys just returned from France) and some too sick to talk much but I can see them looking at them as if they were a relative from home. Little you thought when you planted the bulbs (and I can remember that I helped dig the ground for the bed) what happiness they would bring. I heard one young man here say that there has been so much devastation in France that birds and flowers are seldom seen, and the soldiers all get hungry to see them, and to a sailor that sees nothing but water, water and sky, for so long they are like a letter from home. So you can see what that box of Gladioli has meant to me.

Such instances show more clearly the duty of our American Gladiolus Society to make greater effort to teach the uplifting and comforting influence of flowers.

"On the eastern slope of Mount Valerian the 280 graves of American soldiers, who have died in Paris hospitals, are constantly decorated with flowers, and to each little cross there is pinned a card showing that some woman has vowed that the grave shall never be without its wreath or vase of flowers."

There are some things that can be said only with flowers.

MRS. A. H. AUSTIN.

Flowers Sold at Fair for Red Cross.

One of our subscribers in Massachusetts writes that the management of their local fair decided against flowers at their recent show. Well, from what we know about the management of one Massachusetts local fair, we would just about expect that. Any management that is so shortsighted as to decide against flowers in war time is not worthy of consideration from flower growers. Our correspondent writes further that at the last moment trade exhibits were asked for and two people complied, one showing 18 to 20 varieties and the other 63 named varieties, the total display amounting to about 700 spikes.

The entire lot was presented to the Red Cross which sold them on the ground and in the grand-stand and totaled over \$150 for same. A bride's bouquet, shower effect, made of Gladiolus *Lily Lehmann* was auctioned off and brought \$50.

Rev. C. S. Harrison, the celebrated horticultural writer and lecturer, and who has had the misfortune to be stricken blind, writes recently that the Peony *Richard Carvel* introduced by A. M. Brand, Faribault, Minn., was the last thing on which his vision rested. He describes this variety as a glowing radiant red and predicts for it a great future.

One of our subscribers wants to know how to develop a trade both retail and wholesale. He has grown Gladioli for years for pleasure and now wants to combine pleasure with profit. We would be glad to have suggestions along this line. There is no reason why amateur growers should not sell their surplus stock, and suggestions as to how to do it, will be gratefully received by a good many interested people we are quite sure.

## The Flower Grower

PUBLISHED MONTHLY ON THE FIRST OF THE MONTH BY  
MADISON COOPER, CALCIUM, N.Y.

FOR BOTH AMATEUR AND PROFESSIONAL FLOWER GROWERS

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OUR MOTTO:  
Special favors to none, and a  
square deal to all.

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October, 1918

No. 10

"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### Division of Prize Money at Flower Shows.

The suggestion that prize money be divided into at least three parts, and which suggestion we have repeated from time to time, is brought to mind by the premium list of the Horticultural Department of the Minnesota State Fair which recently came to hand. We find that both in the professional and amateur classes that quite a portion of the prize money is divided into four parts. For instance, in Gladioli there is a class of the best six varieties, six spikes each, with \$5 for first prize, \$4 for second prize, \$3 for third money and \$2 for fourth money. This surely is as near our idea of the division of prize money as can be, and we are naturally pleased that so prominent a show as the Minnesota State Fair should adopt this plan. The New York State Fair has their prize money divided into three parts in most of the classes, but the amount given to first prize is too high in proportion to the second and third. For instance, in Gladioli in the color classes, first place gets \$5, second place \$3 and third place \$2. In other words, the first prize winner gets half of the total money whereas in the class above mentioned at the Minnesota State Fair, where the money is divided into four parts, the first prize winner only gets a little over one-third of the total money.

There are so many arguments in favor of dividing the prize money into at least three parts and preferably into four parts where there is considerable money available, that we cannot understand why this is not always done, except, that it makes more work for the judges and more work for the secretary in figuring out the schedule, etc. Surely the honor of winning first prize ought to be a great consideration and the first prize winner should not take the lion's share of the prize money with the honors which go with being first.

MADISON COOPER.

### You Must Advertise.

Someone has said that the time to advertise is all the time. Some florists and especially Gladiolus growers seem to think that the only time to advertise is when they have stock for sale. Any grower who is in business to stay and

who expects to develop business worth while must keep his advertising continually in mind and figure out how he can improve his copy and make his advertising attractive rather than thinking about discontinuing his advertising because business is dull. If you fail to do these things now the man who does do them is going to take some of your business away from you; there is no doubt about that.

Put your name before the public and keep it there. See that your service is right, that you deliver good stock and that you give prompt attention to all inquiries and correspondence of whatever nature.

Advertise all the time and if you have something especially good which you can sell at an attractive price, tell the people about it and give price. That is the way to get direct results from advertising. Those who do wholesale business largely should keep their name before the trade twelve months in the year whether they have stock for sale or not.

MADISON COOPER.

### Vases for Staging Gladioli.

A reporter on the *Buffalo Evening Express* made some humorous and jocular remarks about the staging of Gladioli at the Buffalo show in milk bottles. The average reporter, we know, is not qualified to pass on flowers and we presume that he saw the milk bottles before he saw the flowers. A flower lover who attends flower shows does not pay much attention to the receptacle in which the flowers are staged except as it might really clash with the flowers themselves.

Our opinion of the quart milk bottles used at the Buffalo show was favorable. They have a broad base which makes them stand well with tall spikes, and they hold plenty of water, but the opening is a little too small for staging several heavy spikes. Certainly there is nothing about the bottles themselves to be badly out of harmony with the flowers.

A specially designed vase suitable for staging Gladioli at flower shows is badly needed, and we have in mind such a vase with a broad bottom and holding perhaps two quarts of water. The opening or mouth of the vase should be oblong instead of round so as to allow for the placing of the spikes in a facing position. We wonder if someone who is sufficiently interested cannot get up a special Gladiolus vase. At least three different sizes would be desirable and two sizes are almost a necessity.

Those who are growing Gladioli or other flower stocks, and who are able to maintain or increase their stocks during war conditions will doubtless reap a golden harvest when the war is over and conditions return to somewhere near normal. Even under war conditions it has been found that the growing of flowers has not been abandoned to any considerable extent and indeed some have even increased their plantings. Therefore, it is recommended that those who are able to carry along a good stock of meritorious varieties should do so, and not think of reducing their stock or closing out because conditions have looked bad. The Allies are winning now and everybody feels better and it is probable that sales during the coming winter and spring will be much better than last year.

Those who are asked to contribute towards the prize list of the American Gladiolus Society next year should be prompt in their response. It is desired that the preliminary schedule should be out early and prompt action is necessary.



# American Gladiolus Society.

## Annual Meeting of the American Gladiolus Society.

The annual meeting of the American Gladiolus Society was held in the parlors of the Iroquois Hotel, Buffalo, N. Y., at 8 P. M., August 14, 1918, the meeting having been postponed from 3 P. M. because the staging had not been completed.

President Kunderd in his address emphasized the importance of flowers in war time in inspiring the workers and the wounded fighters. He praised the exhibitors who had made such excellent displays under the trying conditions this year.

The report of the secretary was then read. It showed that 100 old members had paid up their dues and that 165 new members had joined, making a total paid-up membership of 265. While this was a very substantial gain, yet the secretary urged all the members to work toward a goal of 500 members for the near future. The secretary pointed out that great credit was due Messrs. Kunderd, Cooper and Lane for the increase in membership.

The treasurer's report was then read by Mr. Cooper, showing that the Society was in good financial condition.

The proposed amendments to the Constitution were brought up and discussed. The rules adopted at Newport in 1915 were read and the omissions pointed out. It was finally voted that the president appoint a committee with power to revise the rules or Constitution.

A motion was adopted instructing the above-mentioned committee to designate the termination of the business year of the Society as June 30, and that the year begin July 1 of each year; that those members joining prior to July 1, 1918, be paid up members to June 30, 1919; and that hereafter the secretary be instructed to charge new members who join late, pro rata for the part of the fiscal year remaining.

The discussions in regard to the next meeting place resulted in favor of meeting with the Society of American Florists at Detroit, Mich., in August, 1919, if satisfactory arrangements can be made.

As all officers elected at New York in 1917 hold office for two years, there were no elections except to fill the unexpired term of the late Secretary Youell. A. C. Beal, who had been acting secretary under appointment of the Executive Committee, was elected secretary.

The resolutions adopted by the Park Garden Club of Flushing, L. I., relative to the changing of German or Teutonic names of Roses and other flowers and urging all floricultural organizations to co-operate, was read by the secretary. After discussion no action was taken. It appeared to be the opinion of all members present that all

such varieties would be gradually eliminated by the introduction of better varieties and through the opposition of garden planters to varieties of German origin. As there are few varieties of outstanding merit bearing German names, it did not seem worth while to change their names. After all, why change the names of a few innocent and beautiful flowers and not those of operas, poems, books, cities, towns and American citizens that are of German origin?

The meeting then adjourned.

A. C. BEAL, *Secy.*

ADDRESS OF PRESIDENT A. E. KUNDERD.

*Ladies and Gentlemen :*

Not being blessed with great oratorical ability it has been a matter of considerable concern to me as to how to address you on this pleasant occasion. For, it is indeed pleasant to meet so many fine people, as one always does, at the annual convention of the American Gladiolus Society, and enjoy with them their wonderful display. We all know what is by common consent "The Queen of Flowers," and I am sure I need not tell you what flower is very rapidly becoming by common consent "The King of the Garden." It is not necessary to tell the members of the American Gladiolus Society of the value and importance of our splendid flower, but I feel the importance of repeating on this occasion a few things which have already been better said by others. No class of citizens more keenly appreciate the value of conservation in everything these troublous times than do the members of our Society, but many who have not had the time to consider the subject, have not yet realized the vast importance of floriculture as the hand-maid of the agriculturist and grower of the primary necessities for the table. As the musician is the great inspirer of the men to do more serious fighting, so is the grower of flowers equally or more the inspiration and cheer of those who do the patient and arduous labor of growing the products which furnish the food, and gives the strength to those who do the fighting for the cause of our great nation.

In England, France and other nations, these great principles are fully appreciated, as witness the increasing culture of flowers among the common people; even on the battle front the soldier has his garden where flowers are grown, and soon in our own country the same need will be better understood.

The soldier on the battle line can only use the weapon, but when wounded, his comfort is the nurse, and his greatest cheer are the flowers which are brought to his bedside. This is in brief our best reason for the growing and showing the people our favorite flower, and I would say to our members, "don't be discouraged, be of good cheer, you will soon reap your reward in the appreciation of a grateful people."

Nothing is so restful to the busy man of affairs as his gardening, and who could bear to grow a garden without flowers. The essentials, so called, of the garden are the food of the body, but the flowers are the food of the soul. The essentials of the field were intended for food, but flowers, to give us cheer; and when was man ever in such need of cheer as now? We all are hoping for early victory and honorable peace when

our loved ones shall return to their homes. Can you imagine a greater disappointment to a returned hero than to be taken by you to your gardens and he find therein no flowers? I speak the sentiment of our members who love the Gladiolus (and who does not) in expressing their appreciation to the Mayor and people of Buffalo for the many kindnesses shown us during our stay. To the Press, our thanks for its presentation of our objects and aims. I am sure we cannot forget the great efforts for the success of our exhibition on the part of Prof. Beal, our kindly secretary, and Mr. Cooper of THE FLOWER GROWER, for his great enthusiasm and encouragement. Every grower appreciates fully the toil and sacrifice of all our exhibitors, for certain it is that in a financial way there is only a loss. The greatest reward to our exhibitors in such times as these is in the knowledge of having contributed to the noble work well done.

I hope I have made clear our principal aim in coming together during such trying times.

In conclusion, I desire to say a few words to our visitors and the general public, and invite them to join in the work of our splendid Society, and participate in its benefits. To those not yet so well acquainted with our organization let us say, that our Society was organized in Boston nine years ago; its aims and objects are in part to promote the interest and welfare of its members, to encourage local exhibitions all over our beloved country, to the end that a greater interest may be cultivated, not only in the Gladiolus but for all that is beautiful in flowers, and in life in every way. Our official organ is THE FLOWER GROWER of Calcium, N. Y., a very ably edited monthly, devoted to the Gladiolus, as well as to an interest in other beautiful flowers. Every grower of a garden should be a subscriber as, among its contributors, are many of the leading authorities of our own and other countries. Our membership consists of many people prominent in the best in floriculture from all over the world. It is for your benefit I ask you to join our Society, and become an active member. Aid us for the good of our fellowmen in making it one of the most valuable and important floriculture societies in the world.

Our Secretary, Prof. A. C. Beal, of Cornell University, Ithaca, N. Y., will be pleased to give anyone more detailed information. Much as I regret that we are holding this year's convention under the dark clouds of a sad war, I sincerely hope to be with you again next year under the happy skies of an honorable peace. I thank you,

A. E. KUNDERD.

*President.*

REPORT OF SECRETARY A. C. BEAL.

This is the ninth annual meeting of the American Gladiolus society and it is our hope that it will be productive of plans and measures for making the tenth year the most effective in results of any year in the history of the Society. Let us one and all lend our efforts in making the coming year yield great results in the advancement of the Gladiolus. If we look back over the past ten years we can see the very considerable advance that has been made. There is a greater work for this Society to do. We should do all we can to stimulate interest in the Gladiolus Society by offering our medals and certificates to the local shows. The question is sometimes raised whether it is desirable to offer the medals without restric-

tions as is the case at present. If a local society could affiliate in some way with our Society, it should be helpful to both. We might also offer our medals through such state fairs as have a worthy flower exhibit. It would seem as if no award should be made unless the winning exhibitors are members of our Society.

Supplying THE FLOWER GROWER to the members appears to meet the very apparent need of an official organ for the Society. No doubt it can serve a very useful purpose in keeping in touch with our members. To accomplish this purpose, the advisability of having a column in THE FLOWER GROWER for the publication of items of special interest to the members is something that may appeal to you.

If the society had the financial support, it could do many things not possible to carry out now. A complete catalogue of all varieties with name of originator, introducer, year of introduction with a brief, clear-cut description would be very useful to our members. This is a work for the future.

The last annual meeting took action toward the appointment of a publicity committee. Mr. J. J. Lane, who became chairman of this committee, conducted an active campaign for new members. Although operations were not started until too late to get much publicity, for the Society, through the catalogue circulation of the commercial growers and notwithstanding war conditions, we have received 165 new members. Several of these are in Canada, New Zealand and Australia. The late secretary reported 10 new members last year. When I took over the secretary's office I found 83 paid members on the roll. Since that time 16 old members have paid up. Some of those living abroad have paid two years' dues. The total membership at present is 264. This is a very substantial gain, but it would seem that we ought to be able to have a Society of at least 500 members and I have faith to believe that when the war ends it will be possible to build up the membership to that number. The credit for the increase in new members is largely due to the excellent work of the president, Mr. Kunderd, Mr. Lane and Mr. Cooper, editor of THE FLOWER GROWER. The Society certainly owes them a debt of gratitude for their good work which brought such results in these difficult times. The fact that the Society makes a return to its members by sending them THE FLOWER GROWER has been a material aid I am sure.

The American Gladiolus Society sustained a severe loss in the death of its secretary, Mr. Henry Youell, who had been an officer in the Society from its inception. His extensive knowledge of the Gladiolus gained during a lifetime made him an invaluable member in the councils of the Society.

Another veteran in the Gladiolus world, Mr. Matthew Crawford, passed away during the year. As a writer on horticultural subjects as well as the pioneer grower of Gladioli, he was favorably and widely known. These men did much to advance the interest in the Gladiolus as a garden flower and as a florists' cut flower. Their passing leaves it to us to "carry on."

The members of the American Gladiolus Society owe it to themselves as well as to the Society to rally against the foolish sentiment found in some quarters that flowers have no place in our lives during war time. We are organized to promote the interests of a flower suitable to every home garden where it can send out its message of peace and hope and even joy to anxious hearts that long for loved ones far from the home scenes. Let us then, while doing our part in this struggle, seek the consolation and the joys of growing flowers.

A. C. BEAL,  
Secretary.

### Notice of Registration.

Notice is hereby given that the following variety has been offered for registration to the Nomenclature Committee of the American Gladiolus Society by the originators, Munsell & Harvey, Ashtabula, Ohio:

*Ashtabula*—The flower opens with rosy-white tints in the lower segments, the upper segments are picotee-edged with pale lilac rose 130 (1-4). When the flower is fully expanded the color on the outside deepens to mauve-rose 153 (1). The whole flower when viewed from the front is suffused with mauve-rose which gradually diminishes toward the throat which is rosy-white. The lower half of the throat is marked with irregular spots and splashes of deep lilac-rose 151 (1). The anthers are violet; filaments white with tinges of pale lilac-rose. Stigmas are pale lilac-rose. Tube long curved, upper segment straight or slightly reflexed. Lower middle segment narrowest, others about equal. Flowers face the front, leaving spike flat on the back. Flowers 4" across. Spikes tall, bearing 15 flowers and buds. Habit erect, growth vigorous, well furnished with medium broad leaves. A splendid keeper.

If no valid objection is made, this registration is effective October 15.

A. C. BEAL, *Chairman*.

### Notice for the New Members.

The fiscal year of the American Gladiolus Society has previously ended August first each year. The new members who came in last spring did not have the benefit of a full year's membership. The Society, recognizing the injustice of this, voted at its annual meeting to grant all new members who came in during the membership campaign last spring a full year's membership to date from July 1, 1918. All such memberships will expire on June 30, 1919, unless renewed at that time. Hereafter the fiscal year will begin July first. Those who join late hereafter will be charged pro rata from the date their memberships are received.

A. C. BEAL, *Secretary*.

### Minnesota State Fair Flower Show.

In spite of the fact that about one-third of the space usually occupied by the florists and the garden flower growers was taken over by the government exhibit, a very creditable showing of flowers was made. The center of the hall was occupied by the decorative and blooming plants staged by professional growers. Holm and Olson of St. Paul and Swanson, Inc., and the Chicago Avenue Greenhouse Company, of Minneapolis, made the principal exhibits in this section. Two new features in this section were the entries of perennials by professionals, in which Holm and Olson took first and H. F. Baker, of Minneapolis, second place, and the nursery exhibit, of which Holm and Olson took first and H. F. Baker, of Minneapolis, second. These exhibits were staged in the corner and along the wall, making an attractive background for the garden flower ex-

hibits, which were staged on tables in the aisles.

Three nice collections of wild flowers were shown by Miss Illa Koerner, Miss Ella Johnson and Miss Perry. The garden flower collection in various lots were of the best quality that has ever been shown. Some very fine collections were exhibited, among them being collections by Miss Illa Koerner, Mrs. Frank Morris, Mrs. Chas. Krause, Miss Ella Johnson, Mrs. Brown, Mrs. Fairfax, Mrs. Tillotson and Mrs. Frick.

The dinner table decorations, both of the wild flowers on Tuesday and the garden flowers on Friday, were interesting and attracted a great deal of attention. Miss Perry, Mrs. Fairfax and Mrs. Tillotson had the highest score in the garden flower table contest Friday. Miss Koerner and Mrs. Kidd scored next highest and Mrs. Krause third.

Three collections were entered by children under eighteen. All were creditable. Some very good wild flowers and garden flower baskets were shown, although not as many as in other years.

Mr. E. R. Frizzel of Bush Lake had a collection of nearly 100 dahlias. Mr. Swanson of Wayzata, Mrs. Frank Morris and Rev. Mr. Paul of St. Paul each had nice collections.

Taking it altogether, a very creditable showing of flowers was made by both amateurs and professionals. This, combined with cool weather during the week, kept the hall in attractive condition.

LEROY CADY.

### Preparing a Rose Garden.

For the benefit of those who have difficulty in getting the Tea Roses, Hybrid Teas and perpetuals to blossom satisfactorily, the following method of growing is given. These beautiful roses require more care than some of the other classes in order to have them produce an abundance of flowers.

Select a sheltered sunny location with buildings, tight fences or wind-breaks on the north and west sides. Make an excavation of the size the bed is desired and two feet or more in depth. If the soil is of a heavy nature and poorly drained, dig deeper and put in a layer of broken stone, coarse gravel or some other material that will help on drainage. This should be ten inches thick and a layer of sods, grass side down, should be placed on top. The next layer should be coarse manure, the thickness of six or more inches. Next fill the excavation to within six inches of the top with rich garden soil. Use poorer soil to fill and round up the bed at least four inches higher than the surrounding surface. The object of poorer soil at the top is to induce deep root growth. Deep root growth means more and better flowers. Where the soil is of a sandy nature and the subsoil one that assures good drainage, the layer of broken stone may be omitted.

The work of preparing beds for the Roses should be done as early in the spring as conditions of the soil will permit. Plants must be set early. Perpetuals should be set two feet apart in the bed while Teas will thrive if set no more than eighteen inches.—C. H. CHESLEY in *Rural Life*.

As suggested editorially last month growers who are getting out catalogs for the first time should be a bit careful about the question of prices.

## WAYSIDE RAMBLINGS

### AGE OF GLADIOLUS CORMS.

On this subject my experience dating back some years may prove interesting. When I was a boy in short pants it was my father's regular practice every Sunday to hitch up the horse and make a tour of the greenhouses. I being the only one of six children interested in flowers made the trip with him and incidentally got rid of going to Sunday school.

One Sunday we discovered a yellow Gladiolus in bloom, price 75c. It was bought immediately and tag with name on it placed beside it. On the way home father stopped and told my brother-in-law about it and he wanted to see it, so back we went and then the bloom was cut so no one else would see it. That fall father got the bulb and it was given special care until spring. It made good growth, putting up a spike about three feet high. It was always grown by itself as it was considered the King of the garden.

This yellow Gladiolus never made any cormels and never a divided corm nor did it set any seed. As the years went by the spike seemed to grow shorter, but the size of the flowers was about the same. When my father died my brother wanted the bulb and he is still growing it in the angle made by the porch adjoining the house and where it has the sun all day. It seems to be growing stronger each year so far as I am able to judge. As I am 54 years of age you can see that this Gladiolus corm is over 40 years old.

D. E. NELSON.

### TIME FROM PLANTING TO BLOOMING OF GLADIOLI.

Referring to the article by Dr. C. C. Miller in the Wayside Rambling Department for September, it occurs to us in this connection that a variety which averages to bloom early may be considered an early variety and even though there might be exceptional bloom from some particular variety one year, which would come early, it would not necessarily put this variety in the early blooming class. Anyway, it is probable that only the real early varieties would bloom early. *Pink Beauty*, we believe, is the acknowledged leader so far as earliness of bloom is concerned. It is presumed that many of our friends will at once say that they have a seedling which may beat *Pink Beauty*, but please remember that often the first bloom from seedlings comes earlier than it will after the variety has been grown successive years. Once in a while some one reports a variety blooming along with *Pink Beauty*, but seldom, if ever, does any variety beat *Pink Beauty*. *Halley* with the Editor is not a close second to *Pink Beauty* by any means. It comes from ten days to two weeks later and there are several other varieties that are as early as *Halley* like *Lily Leh-*

*mann*, *Prince of Wales*, *Pink Progression* and *Lucretia*. *Pink Beauty* we must all admit is not high class as a flower, but when there is no other variety it is certainly worth having and it deserves a place in every Gladiolus grower's garden because of its earliness.

As suggested by Dr. Miller it would be better to take the average time of blooming for a given number of corms, but this means considerable record work and it would seem that the earliest bloom to open is a pretty fair guide. Since Dr. Miller wrote the article referred to he writes that he finds the average bloom of *Pink Beauty* July 12th which is only four days later than its first bloom.

We have it in mind to some time take the average dates which have been published in THE FLOWER GROWER from time to time and list the varieties from these average dates as to their earliness. Additional records are desired before doing this.

MADISON COOPER.

### MARKING TAGS FOR GLADIOLI.

In the September issue of THE FLOWER GROWER I have read about the marking tags and offer my method for consideration. The way I do it is this:

I take strips of paper, write the name of the variety I want to mark on it and fold it double, with the name inside. Then, it is pressed down between a leaf and stem and it will surely stay there. If a person has a lot of one kind to tag out, he can sit down and write a number of tags and go down the field and have it done in no time.

JOHN ZEESTRATEN.

### TOOL FOR ROGUING GLADIOLI.

Take a large file such as the blacksmiths or horseshoers use, sharpen the point and drive the other end into a piece of wood, (a corn cob will do) and you have a light handy digger for Gladioli, plantain, dandelions, etc.

COUNTRY JAKE.

### Propagating *Lilium Candidum*.

One of our subscribers, who has been interested in growing *Lilium Candidum* for many years, wants information about propagating the "Scales" to best advantage. He says he has several bushels of scales of which he would be glad to propagate a part and send a part of them to those who are interested, for enough to cover postage and packing. He is desirous of awakening renewed interest in the Lily and suggests that it is a fit companion to the Gladiolus, of which he is also very fond.

Can anyone throw light on the subject of growing *Lilium Candidum* from the scales?

### New York State Fair Flower Show.

(From Florists' Exchange.)

The floral exhibit at the fair at Syracuse was large and called forth much favorable comment. There were a large number of entries.

The table decorations brought out many fine exhibits. Werner Bultmann won first honors in this entry with a very pretty center piece of Gladiolus *Panama* and individual favors of the same variety. In the bridal bouquets P. R. Quinlan and W. Bultmann each won first in two classes. There were many entries in these classes and some exceptionally pretty work was shown by out-of-town florists. A large basket of Roses exhibited by P. R. Quinlan carried off first prize.

From Buffalo, Wm. Griever and Edw. Slattery, manager for the Palmer store showed attractive decorative designs which aroused considerable admiration.

The exhibit of the F. R. Pierson Co. of Tarrytown, N. Y., was up to the firm's usual high standard, consisting of several long tables of Ferns and Roses.

John J. Prouty of Baldwinville, N. Y., won first in the Gladiolus classes for white, pink, blue, yellow, red, and six ruffled varieties; also first for a collection of 12 varieties and first for a collection of 20 varieties. Thus he had a perfect score with eight firsts out of eight entries.

The F. R. Pierson Co. carried off the grand special Rose premium for the best collection and display of Roses, comprising 500 blooms and consisting of the following varieties: *American Beauty*, *Columbia*, *Rosalind*, *Silvia*, *Francis Scott Key*, *Mrs. Charles Russell*, *Double White Killarney*, *Killarney Brilliant*, *Sunburst*, *Ophelia*, *Mrs. Aaron Ward*, *Hoosier Beauty*, *Richmond*, *Radiance*, *Christine Miller* and *Mme. Cecil Brunner*.

The premium for the best new hybrid tea Rose introduced in 1917-18, was awarded to Jerry Brookins, Orchard Park, N. Y., for *September Morn*.

The silver medal awarded by the American Rose Society for the best collection and display of Roses by an amateur was captured by the Syracuse Rose Society whose collection consisted of 57 varieties of hybrid perpetual, hybrid tea and tea Roses.

Jerry Brookins, Orchard Park, N. Y., exhibited some very fine hybrid tea Roses, conspicuous among his collection were well grown specimens of *Mrs. Francis Scott Key*.

John J. Prouty's prize-winning collection of Gladioli, 20 varieties, five spikes each, named, comprised the following: *Niagara*, *Golden King*, *Ida Van*, *Attraction*, *Panama*, *Mrs. Francis King*, *Baron Hulot*, *Hazel Harvey*, *Glory of Holland*, *White King*, *Loveliness*, *Annie Wigman*, *Empress of India*, *Princess*, *Pink Perfection*, *Glory*, *Mrs. W. E. Fryer*, *Mrs. Frank Pendleton*, *America* and *Black Beauty*. Mr. Prouty's collection of six spikes, ruffled, named, was made up of *Glory*, *Purple Glory*, *Orange Glory*, *Cinabar*, *White King* and *Mottled Beauty*. His prize winning exhibits for color were: white, *Europa*; yellow, *Schwaben*; pink, *Pink Perfection*; red, *War*; blue, *Baron Hulot*. The following made up his exhibit for the best 12 varieties: *America*, *Ivory*, *War*, *Gretchen Zang*, *Mrs. Frank Pendleton*, *Peace*, *Pink Perfection*, *Mottled Beauty*, *Schwaben*, *Evelyn Kirtland*, *Charlemagne* and *Summer Beauty*.

In the Gladiolus classes, amateur, the silver medal offered by the Am. Gladiolus Society for collection of Gladioli, was awarded to Madison Cooper, Calcium, N. Y. His group consisted of *Myrtle*, *Lily Lehmann*, *Europa*, *Niagara*, *Schwaben*, *Glory of Holland*, *Eldorado*, *Wm. Walt*, *War*, *Peace*, *Liebesfeuer*, *Summer Beauty*, *Evelyn Kirtland* and *Intensity*. Mr. Cooper also took first for his collection of ten named varieties, three spikes of each. His collection comprised *Madam Mounet Sully*, *War*, *Peace*, *Loveliness*, *Giant White*, *Mrs. Dr. Norton*, *Mrs. Walt*, *White Glory*, *Mrs. Frank Pendleton* and *The King*. Mr. Cooper's exhibit of *Primulinus Hybrids* in colors was unusually fine.

In Dahlias, the premium varieties staged by N. Harold Cottam & Son, Wappinger Falls, N. Y., comprised: *King of the Autumn*, *Weber*, *Rev. T. W. Jamieson*, *Southern Belle*, *Pierrott*, *Grace Reed*, *John Reding*, *Mme. J. Coissard*, *Bianca*, *Gracchus*, *Margaret Bouchon*, *D. M. Moore*, *Dr. H. H. Rusby*, *Sneezevitze*, *Snowstorm*, *America*, *Breezelawn*, *Princess Juliana* and *Governor Guild*.

The F. R. Pierson Co., Tarrytown, N. Y., staged a large and splendid trade exhibit of Nephrolepis Ferns, including varieties in which it specializes. The group consisted of *N. elegantissima*, *N. elegantissima compacta*, *N. muscosa*, *N. Smithii*, *N. superbisima*, *N. viridissima*, *N. Scholzei*, *N. Harrisii*, *N. Teddy, Jr.*, *N. Bostoniensis compacta*, *N. Giatrasi*, *N. tuberosa compacta* and *N. cordata*. The exhibit was in charge of J. Theo. Trevillian and Alfred Wood.

The amateur section was fully represented and the exhibits showed skill in culture and good judgment in selecting material for exhibition purpose.

Among the striking features of the show was the New York State service flag, 62 stars representing the number of counties in the State. The size of the flag was 11 ft. by 18 ft., and 60,000 blue immortelles, and 10,000 white Cape flowers were used in it, 100 sq. ft. of Ruscus forming the border. The flag, was designed and made by the superintendent, Prof. D. Lumsden, Ithaca, N. Y. There was also an American flag, in which 6000 Asters were used, in the following varieties: red, *Rosy Red*, early branching type; white, white late branching, blue purple late branching. The "Heart of France" was a large design in the shape of a heart comprised of the new red Astor, *Heart of France*. The last two features mentioned were designed and exhibited by James Vick's Sons, Rochester, N. Y.

D. LUMSDEN

## Gladiolus Show at Lansing.

The second annual Gladiolus show held in the lobby of the Capital National Bank at Lansing, Mich., was a success. It was held during the week of August 18th, and the attendance was large, last year's show having helped to popularize the Gladiolus in the city.

More than one hundred different varieties were shown by local growers. These included the popular varieties like *Mrs. Frank Pendleton, Niagara, Giant White, Baron Joseph Hulot, Mrs. Francis King* and *America*, and some of the newer varieties like *Mrs. Dr. Norton, Schwaben*, etc., were also shown. The lobby of the bank makes a fine place for the display of flowers. We have hanging in the office of THE FLOWER GROWER a frame containing more than a dozen photographs made at the time of last year's show, and as a setting for beautiful flowers it would be difficult to find a more attractive place than the bank lobby.

Local Gladiolus growers and florists were well represented. Earl Edgerton showed the Kunder varieties especially. L. W. Hoisington had forty different varieties on display. George Glassbrook had some of the newer varieties and standards neatly arranged. Fred Baumgras probably had more different varieties than any other grower and many of these were new and rare and showed for the first time in Lansing. Mrs. W. J. Whitely showed a number of the newer varieties including *Mrs. Dr. Norton*. The florists, The Alpha Floral Co., The Lansing Floral Co., Harry Saier and G. Fred Bauerle were all represented by good displays and several amateurs also helped to make the show a success with vases and baskets of bloom.

August 24th, the last day of the show, was Red Cross Day and the local Gladiolus growers donated flowers, the entire receipts going to the Red Cross. One hundred and sixty-six dollars and sixty-six cents was realized from the sale of flowers at the bank.

## Effect of War on Floriculture in England.

Nelson Coon, a florist of Rhinebeck, N. Y., with the colors in Europe. writes in the *Florists' Exchange* on the effect of the war on floriculture, and especially in Great Britain, as follows:

What has war done to floriculture here? I have often asked gardeners and florists here. Sometimes they have answered and sometimes the answer was evident. The florist profession has, I believe, not been hurt a bit, outside the first shock, and many men report better business than ever. Many new graves, of course, bring some business but my observation has been that as a whole the people of Great Britain are a flower loving people. Many a time I have seen homely country people, with perhaps a garden full of many flowers, step into a shop and purchase perhaps a six penny bunch of some perennial. This is the kind of spirit that makes trade.

In reporting the Buffalo flower show of the American Gladiolus Society last month we neglected to give the names of the judges. The flowers were well judged by J. J. Grullemans, Jr., Avon-Lake, Ohio; Joe Coleman, Wayland, Ohio, and E. A. Slattery, Buffalo, N. Y.

## Red Cross Gladiolus Sale at Winona, Minn.

The Pfeiffer Nursery, of Winona, Minn., write us about a Red Cross Gladiolus sale which was recently held in their city. The exhibit and sale was staged on an open pavilion in the business district of the city and conducted by the local Red Cross Society. The exhibits were attractively arranged on tables, each table in charge of several attendants. The bloom was donated outright by the Pfeiffer Nursery and about 2,500 spikes were sold, the proceeds, \$169, all going into the general Red Cross fund. Mr. Pfeiffer reports that some of their choicest bloom sold as high as 25c. per spike. The affair was considered a great success in every way.

## The Glad Philosopher's Musings.

This bit of wisdom is copied from Jessie Peabody Frothingham's interesting book, "Success in Gardening," and stamps the author at once as a philosopher: "Let no one think that because he has a small plot he cannot have a garden. Nothing is prettier than to see a 25 foot yard a mass of bloom. He can plant something, even on ten feet of land, and have flowers, even in a soapbox."

It is not always the largest or most imposing garden that produces the most beautiful flowers, nor does the biggest bouquet always make the most striking impression; and a single plant growing in a cracked and faded pot in the sunny window of a crippled child's room in some rude garret, if lovingly tended, may produce blossoms surpassing those produced in some rich man's pretentious conservatory.

One day, many years ago, the writer—then a boy—accompanied his mother and a party of ladies when they visited a poor house, and were being shown through the institution by the matron. Passing from room to room we were impressed by the diversity of appearances, revealing the varied temperaments and conditions of the occupants. One of the inmates, a simple-minded girl, proudly exhibited great strings of buttons of various sizes and styles which she had collected through years of begging them from visitors. Some of the rooms were illy furnished and cheerless, and these usually revealed a sullen, morose nature in the occupant. In one large and sunny apartment, an old lady with a kindly face came to greet us as we entered her door. Shelves across the windows held numerous tin cans filled with growing plants and blooming flowers, all showing evidence of painstaking care. We lingered in this old lady's room quite a while, for she was refined and talkative, and showed that she appreciated our visit greatly. To this day the recollection of the plants growing in her windows lingers in my memory, although I have

long since forgotten what I saw in most of the other rooms we visited that day.

I have sometimes wondered whether this dear old lady, who was happy, though in the poorhouse, had learned to love flowers as a result of having been endowed by nature with a cheerful disposition, or whether an innate love of flowers and a lifetime's association amongst them had implanted the sunny disposition in her soul that led her to a happy, peaceful enjoyment of her last days. Can you solve the riddle? I confess that I cannot.

I'm glad to have a bit of land;  
I love to stir it with a hoe;  
To plant some seeds, and rake them in;  
To water them, and watch them grow.

Earth is not all, the flowers teach,  
Though in its soil we plant the seed—  
Sunshine and rain from heaven sent,  
For their development they need.

So, when their glorious blooms unfold,  
Reflecting joys from heaven above,  
They turn my thoughts to God. I thank  
Him then because I live,—and love.

THE GLAD PHILOSOPHER.

It seems strange how persistent is the idea that the tops or leaves of a Gladiolus plant should be left on the bulb for a few hours or a few days at digging time. Those with experience invariably state that the tops should be cut off promptly when the bulb is pulled out of the ground. The quicker this is done the better not only on account of its advantage to the corm, but as a matter of convenience in handling them after digging.

## CLASSIFIED ADVERTISING.

Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.

W. E. KIRCHHOFF CO., Pembroke, N. Y., growers of the finest Gladioli, such as Pendleton, Panama, Niagara, Pink Perfection, Europa, Mrs. Fryer, War, Peace, etc. Correspondence solicited.

MUNSELL & HARVEY, Ashtabula, Ohio, growers of GLADIOLI and PEONIES. Would appreciate your order for Peony roots for fall delivery, at least the request for a price list.

WE ARE GROWING GLADIOLUS BULBS for the retail dealers. We have room for your order whether one or one million. Ideal soil. Can we grow some for you? Write for terms, C. I. Hunt & Son, Hunt, N. Y.

GLADIOLI—Clean, healthy, young stock absolutely free from disease. Forty leading commercial varieties. Prompt shipment after Nov. 1st. Reasonable prices. Send for wholesale list. T. H. Fuller, Gladiolus Specialist, 649 Marshall St., Battle Creek, Mich.

WANTED—GLADIOLI—CONTRACT PRICE—DELIVERY FALL 1918—We will buy now for delivery fall 1918, large quantities of Gladioli, leading varieties. State varieties, quantities and lowest possible CASH PRICE for first, second and planting sizes. Must depend on full delivery of stock offered. We are willing to advance part payment on contracts before delivery is made. We can only pay RIGHT PRICES; we don't expect bargains but cannot consider FANCY PRICES. Reply to "BUYER," care of THE FLOWER GROWER.

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# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

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FOR BOTH AMATEUR AND PROFESSIONAL GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

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## Improving the Iris for Garden Effect.

[Written expressly for *The Flower Grower*.]

BY GRACE STURTEVANT.

THE BEARDED or Pogoniris with their bold foliage and large blooms of almost every hue have been a hobby of mine for a number of years but it was with the discovery that seedlings were not at all difficult to raise, and the results infinite in variety, that the real joy of creating new and finer varieties developed; the pleasure made greater by the fascination, and anticipation, through the uncertainty of the result.

I plant many chance seeds because I cannot resist saving those that set on my fine varieties but it is from artificially pollinated seed that most of the finest flowers have come. Fine stock is as well worth using in Iris as in any line of breeding and I select varieties for crossing that have the desired characters in growth, shape, size or good branching habit; the color cannot well be predetermined except where flowers of similar color and tone are used, then the chances are that the seedlings will resemble the parents. *Empire*, a yellow, for example, is a cross between the dark purple *Mon-signor* and *Aurea*. It has the growth and form of the former but is a shade darker yellow than the latter. Any attempt at planning for a certain result entails, of course, the comparison and study of many careful records.

When the seed is ripe it is gathered and dried and then planted in the seed bed, which is mapped and marked off into 8 inch squares. Each pod has a square to itself and is recorded when planted; in the spring the tiny seedlings are transplanted to their appointed places where they are to bloom and when they flower each receives judgment on its corresponding card and the good ones a full sheet description.

In describing and recording colors I use "Robert Ridgeway's Color Standards and Nomenclature" and find it a necessity. I only wish that it might be

universally used for catalogue descriptions. The terms seem complex to be sure, but Raisin Purple, for instance,



GLADIOLUS—GLORY OF NOORDWIJK.

Originated by Alkemade in Holland, and exhibited in London for the first time in 1913. The color is a soft canary yellow, some call it a Naples yellow. It is overlaid on the edge of the petals with rosy pink. The flowers are large and of graceful form and several are open at one time giving a very beautiful effect.

We understand that *Glory of Noordwijk* is one of the yellows that is difficult to grow, but we have no direct information from those who are growing it in this country.

may carry as clear a conception of the true color as the hackneyed blackish violet and it *does* permit of other than actual comparison of plants in flower. I have many hundreds of records but not yet can I put my finger on the

dominant traits in Iris in the Mendelian sense. Venation on the falls is usually dominant but in all other respects tendencies only can be traced and then only in special cases; *pallida* selfs seem almost a pure strain (the number introduced of similar coloring bears this out); *Trojana* seedlings are usually deep toned bicolors. *Oriflamme* often gives a flower with wide spread segments; the shape of *Pallida speciosa* is very common; *Caterina* almost invariably gives a blend if venation is not present in the other parent, and very frequently a most undesirable flexuous stem. Two pinks often give pink, but that usually follows in the clearer colors, where they are dulled or clouded a more complex lineage is indicated and the result is apt to be more varied as the strong points of the various ancestors crop out; and so it goes, each is a mere sign post that points the way and just as you seem to be on the right road a seedling develops that does not belong. The individual variety with its many inherited factors must be tried out in its progeny. In my crossing I have dealt almost entirely with the pogoniris group, there is sufficient interest for a life time and a wide field for improvement among the present trade varieties, and this group seems of greatest garden value. The nomenclature of the Japanese Irises is most confused and personally they do not appeal. The Siberian group has a comparatively narrow range of color and all seed so freely and come so true from seed that one's interest slackens. The interesting Pogon-Regelia hybrids (*Hamadan*, *Paracina*) etc., and the soft-colored hybrids of the Reglio-cyclus group are still a little difficult of garden culture. I dream of a Bearded Iris with the venation of *Susiana* or *Korolkowi* but it is still a dream.

I demand much of a seedling before it receives a name and the score card

published in the April number of *The Garden Magazine* well rates the value of the different characters. Good growth is essential and a pleasing habit of growth forming what an artist might call a well composed stalk, or clump, or mass, is to be desired. *Pallida Dalmatica*, *Neptune*, *Mrs. Horace Darwin*, *Albatross*, *Flavescens* or *Hector* have distinctive growth. Height is important for emphasis but the garden needs masses of low bloom as well and it seems as though the large size was often a drawback for mass effect. Shape and substance I value highly, perhaps too highly when we realize that they can only be seen and appreciated at close range. Color, the most noticeable of all characters in Iris, I have left until last. Personally, I cannot abide the dingy tones such as are seen in *Pfauenauge* and *Shakespeare*. I observe dubiously the clouded *Nibelungen* and *Neud'Orage*, though I realize that in some situations they are charming, I really give high rank only to the clear, clean tones, whether in the delicate venation of *Mrs. G. Reuthe* and the clearly defined markings of *Albatross*, the strong contrast in *Fro* and in *B. Y. Morrison*, or blends such as *Afterglow* and *Niverna* that in effect approach the self tones so familiar in *Pallida Dalmatica* and *Kochii*. Coloring may be entrancing for indoor decoration or close garden use, and yet in a mass be monotonous or inconspicuous, and to some varieties I credit what I term "carrying quality," a value for massed or distant effects; here the selfs and simple bi-colors reign supreme, *Edouard Michel*, *Perfection*, or *Nine Wells* have a somber richness; *Innocenza*, *Juniata*, *Mithras* or *Florentina* show up well, while *Windham*, *Lohengrin* or *Iris King* lose distinction in the distance.

With all these factors to consider I find few of pre-eminent merit. The true *Pallida Dalmatica*, *Princess Beatrice*, heads the list. *Iris King*, *Alcazar*, the rich and somber *Archeveque*, *Carthusian*, *Trojana*, *Nine Wells*, *Edouard Michel*, *Prosper Laugier*, *Monsignor* and among my own seedlings, the pale yellow *Shekinah*, pink-toned *Avalon* and *Jennett Dean*, clear blends as in *Mme. Cherie* and *Mother of Pearl*, rosy *Dream* and *Arethusa* are all hard to surpass. Among the plicatas it is impossible to choose, and there are many beauties that should be mentioned for their all-round general worth but yet do not stand out above others of similar coloring for garden use. Such judgment is, however, a very personal one and fortunately for us all our tastes do not agree.

Any one may have an Iris garden or border to fit his pocketbook or leisure time, from one of small initial expense and upkeep to a large one. I think for real pleasure it should be small enough to be cared for by the owner, at least until he becomes personally acquainted with his varieties and their especial charms. In this way his interest will grow with his collection.

The bed must be well drained and should be deeply dug as that will obviate frequent transplanting, an occa-

sional top dressing of bone meal being all that is required to maintain good growth. Trim off the free part of the leaves before planting so that the wind will not prevent the roots getting a new hold, place the rhizome practically on the surface and firm the soil well about the feeding roots that go straight down and anchor it in place. Do not irrigate or water newly planted Pogoniris. Where the Iris has a prominent position in the border after its flowers are gone, a variety should be chosen that does not die down or have poor foliage, and the dead blossoms and leaves should be removed from time to time to keep the border neat.

I find only two serious troubles for my Iris, an Iris borer that must be hand picked, and "Iris rot," a fungus disease that is very infectious and destructive. I have tried every suggested remedy but have come to the conclusion that the only safe thing to do is to dig up the afflicted plant and burn it all.

I should like to hear from any of your readers who may wish to try growing seedlings or who are already raising them. I am not only intensely interested in them but we wish to keep in touch with other producers so as not to offer anything that is not distinct and fine. The great need of Iris growers today is to maintain a high standard.

## New England Fair Flower Show.

WORCESTER, MASS., SEPT. 2-5.

In spite of the fact that this country is at war, the New England Fair held in Worcester, Mass., September 2-3-4-5, proved to be more largely attended than usual. This was due probably to the fact that the fair officials turned over the entire proceeds of the fair to the American Red Cross.

The floral displays were up to their usual high standard.

In the Gladiolus class the entries were not quite as numerous as formerly but the quality was good. In this particular class most of the exhibitors seemed to have failed to match the quality of their flowers with good taste in arranging them. Several of the entries were extremely poorly staged, not only detracting from the pleasing appearance of the entry but giving the people who attended a very poor opinion of the flower represented. Fully 50% of the effect is in the arrangement and the balance is in the flower. Even poor flowers considered individually can be arranged so that they become very pleasing.

In the competition for exhibit of flowers covering not more than 30 sq. ft., the first and third prizes were taken by exhibitors who grouped all kinds of autumn flowers together with ferns and different kinds of foliage. The second prize went to an exhibit of Gladioli pure and simple staged by C. W. Brown & Son of Ashland, Mass. While the value of this exhibit might have been enhanced had the flowers been blended with plenty of green, it made a striking display and one that was much admired.

In the competition on the vase of 12 spikes of white Gladioli, *Europa* walked off with first and second honors. The first prize, won by Mr. Edgar M. Wilson of Worcester, was especially deserving of merit, the flowers being of an unusual clear white color and in perfect form.

On the vase of pink, 12 spikes, the first went to *Panama* and the second to *America*.

On the vase of 12 yellow, *Golden King* won the first and *Improved Klondyke* took second. Not a vase of the old standby, *Schwaben*, was shown.

The class for a vase of 12 spikes of blue was won by *Baron Hulot*, there being only one entry.

In the class for 20 bottles, one spike of each there were three entries all of high quality. The winning collection included the following varieties, viz: *America*, *Panama*, *Mrs. Frank Pendleton*, *Mrs. Watt*, *K's Glory*, *Mary Fennell*, *Pink Perfection*, *Niagara*, *Taconic*, *Rochester White*, *Peace*, *Europa*, *Jean Dieulafoy*, *Mrs. Francis King*, *Loveliness*, *Wm. Mason*, *Golden King* and *Liebesfeuer*. In the second collection the following were included: *Crescent Queen*, *Prince of Wales*, *Mongolian*, *Madame Butterfly*, *Rouge Torch*, *Couquette* and *Snow Glory*.

In the class for 10 new unnamed varieties, three spikes of each, there was but one entry, that of C. W. Brown & Son of Ashland.

This completed the list of classes for Gladioli, although the above firm entered a large basket mainly of Gladioli in competition with baskets of various other flowers, Mr. Brown wishing the public to observe that the Gladiolus is fully as decorative as any other flower and that it lends itself to graceful arrangement.

To one who has attended these fairs for several years, it is interesting to see the growth of interest in the Gladiolus. Part of this is due no doubt to the inherent qualities of the flower but part, I am sure, is due to the splendid way in which most of the growers of Gladioli have brought the flower before the eyes of the public at the fairs.

It is a sort of propaganda that pays large dividends, perhaps not immediately, but they come surely just the same. It is a case of casting your bread on the waters and after many days having it return to you.

RAY C. BROWN.

## Cutting Tops off Gladiolus

### Corms at Digging Time.

It seems rather strange that the old-time practice of leaving an inch or two of the stalk on Gladiolus corms when cutting foliage from the corm should survive so long. Even at this late date writers recommend the leaving of more or less of the stalk on the corm.

As we have repeatedly pointed out there is absolutely no reason for leaving any part of the stalk attached to the corm after it is taken out of the ground. Cut it off at once and cut it off close.

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

### Seedlings and Curing Gladiolus Bulbs.

**T**HE PET SEEDLINGS are now snug and safe in winter storage but where we can easily have a peep at them, read the labels and again be with them as memory brings afresh the vision of their beauty.



The harvesting has been as enjoyable and fully as interesting as the blooming season, for long ago we learned that while a seedling may be very beautiful it is almost worthless if the bulb is poor and not productive of bulblets, so at harvest time we eagerly scan the bulbs for proof of value. When a promising new variety appears we get out our field book and jot down its perfections but we cannot pronounce judgment until we have seen the bulb.

A year ago we were favored by the presence of a seedling novelty who brightened our season with her sweet face, and then passed away while in storage, leaving only one tiny bulblet. We nursed the bulblet to a bulb the size of a large hickory-nut, but there are no bulblets, and if it proves to be a non-producer shall we discard it as worthless, or save the seed from its blooms and grow hundreds and perhaps thousands in the effort to find that face again? Growing seedlings is interesting, and I think the game would pay for the trouble. Years ago a Gladiolus of almost perfect form, and beautiful color, appeared among our seedlings. Season after season we grew it carefully hoping for increase of bulblets but there were very few. We had, however, taken the precaution to save and grow seed, and after

prising how quickly bulbs will cure if spread in the open air on sunny days. If spread thickly they should be stirred occasionally. The grower of half an acre, or half a hundred acres would do well to keep in mind the necessity of early curing of his stock. It is a saving of time and bulbs to have each day's harvest made ready for rapid curing and often by the time the bulbs are out of the ground, the ones first dug are ready for rooting.

To do this the bulbs should be freed from soil as much as possible by being forked or tossed lightly—which will not only loosen the soil but also shake off the bulblets—then spread in trays, being careful to not heap them and thus cut off the air space when stacked. If weather is mild and sunny they may be placed in the open, but if there is danger of freezing they should be stacked in a cellar or storage building with windows open to allow good circulation of air. A little heat will also help.

If, on account of weather conditions, it was necessary to get the bulbs with the soil into storage quickly, the first inside work should be to get them in shape, as described above, or some better way, for curing before beginning the rooting. The customer who wants his stock shipped him before severe weather sets in, does not want green bulbs that freeze easily.

The bulblets which were shaken off may have the soil sifted from them or will keep in very good condition if some soil, preferably sandy, is left with them.

MRS. A. H. AUSTIN.

### Division of Prize Money at Flower Shows.

Last month we had something to say about what the Minnesota State Fair management does in the way of division of prize moneys, and in response to a letter of inquiry, Professor LeRoy Cady of the University of Minnesota, writes as follows:

"In reply to your question as to the division of premium money at the Minnesota State Fair, will say that this scheme has been followed in the Horticultural Department and I think quite generally in other departments. We have found in some ways that this is preferable to the pro rata scheme and often is more satisfactory. Two premiums are not enough to offer where anywhere from a half dozen to a dozen people are competing. Sooner or later the more timid drop out and your exhibit dwindles down. This, of course, is one advantage of the pro rata system, as every one with a cred-

itable exhibit gets a portion of the premium. Personally, I am inclined to favor, in almost all cases, at least four premiums and in classes where there are apt to be a large number competing I would run these out still further. We have a number of county fairs in the state in which some thirty premiums are offered on potatoes. The first three are large and the others usually fifty cents or a dollar. I notice that these classes are usually pretty well filled."

### Dormant Method of Wintering Geraniums.

BY BERTHA BERBERT HAMMOND.

[Written expressly for *The Flower Grower*.]

To winter a large number of Geraniums in the usual way, requires more window space than the average home can afford to yield without the rooms being materially darkened and the house being turned into a mere storage place for the plants. Still these Geraniums which have beautified the surroundings and filled hearts with joy and gladness by their constant and lavish display of leaf and bloom deserve a kinder fate than to be left out to freeze and die. Therefore, the dormant method may prove apropos not only to those who desire to keep over a large number of Geraniums but also to those who dislike to see the plants frost killed.

For three years the writer has used with success the following method of wintering Geraniums: Before they are injured by frost take up the sturdiest, well-rooted plants, leaving whatever soil happens to adhere to the roots. To exclude light and help keep the plants in a dormant state wrap bundles of plants in several thicknesses of newspaper and hang roots up in a dark, dry but frost-proof cellar and leave them alone until spring. To avoid any possible ill effects from the transfer from out of doors to the root cellar, it is advisable to keep the plants in a shed or sheltered porch for a day or two before hanging them in their permanent winter quarters.

About the first week in May, unpack the plants, place the roots in a tub of water for five or six days and they will begin to show signs of life. Prune quite severely, and set the plants out in a somewhat sandy, sunny bed and in about six weeks' time they will be strong, healthy and in prime condition to develop buds for a season of continuous and rich display of bloom.

Some of the timid and weak-kneed Gladiolus growers are inclined to reduce their stocks for 1919 planting. This is an opportunity for growers with foresight and courage to acquire meritorious varieties at prices below their actual value. In our humble opinion it is a poor time to get frightened over the Gladiolus business. Nothing but a brilliant future is in prospect.



Bulbs on trays curing in the sun at Mrs. Austin's Elm Hill Farm.

repeated efforts were rewarded with a variety of the same rich color, nearly as good form, and a good producer of bulblets—our *Cardisun*.

One cannot be too careful in storing bulbs and bulblets, for well cured bulbs are less susceptible to disease, and bulblets will grow quicker and more uniformly if stored properly. It is sur-

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"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### The Reading Habit—All Should Acquire It.

If this question of whether he could read or not were put to the average individual, he would, of course, answer yes, but the meaning of the question is not whether we can spell out the words; the question is do the words after they are spelled out mean anything to us, and are we able to apply our minds to the subject we are reading about? All of this is preliminary to suggesting that the most of us have not the reading habit.

The editor has been quite surprised, and even almost disgusted at times, when attending the flower shows to have people come and ask simple questions about growing flowers that are answered in almost every issue of THE FLOWER GROWER. Many people are willing to spend money for flowers and for bulbs to grow flowers, but yet are unwilling to pay the small price of \$1.00 per year for a magazine which will tell them more about growing flowers than they can secure in any other way. Such people, we assume have never been taught, or have never taught themselves, the habit of reading instructive and useful literature. It is, we believe, pretty well understood and acknowledged that Americans generally are readers of light fiction and the daily papers, and further than this they will not go.

The habit of reading, not of light fiction and the daily papers, although the daily papers are a necessity, but of reading useful and instructive magazines and books should be acquired early in life by all. In these days when entertainment is the chief aim of so many, the acquiring of the reading habit seems to be difficult and there are few among the younger generation who really know how to read.

This lament is a mere statement of fact without any positive suggestion of a remedy, but it is a fact nevertheless which must be acknowledged. A few people acquire the reading habit after they reach maturity, but those who pass their thirtieth year, we will say, without acquiring the habit of reading useful matter, are, as they grow older, more than likely to take up useless fiction and matter of a lighter character which is of questionable value.

Let it be the aim of those who read to test every piece of reading matter which comes to their hands as to whether it is instructive, whether it teaches a lesson, or gives useful

information. If they put this test to what they read they will likely soon determine that the great bulk of printed matter is almost useless and some of it worse than useless. It is true that it is more difficult to acquire the habit of reading useful matter than it is to read light stuff, but one should persist in the determination to read only, or at least chiefly, those things that have positive permanent value.

The young should be encouraged to read and they should be given time enough for reading. Necessarily the young must be started on light reading, but they should not be allowed to continue this indefinitely, and should be furnished with selected matter of an advanced character as they grow older. The daily papers and especially the Sunday papers are, except for the editorial, news and telegraphic departments, worse than useless for instruction and development of the individual. More papers and magazines devoted to the arts, sciences, horticulture, agriculture and kindred subjects should be read systematically and continuously.

Acquire the reading habit and be sure you read rightly.

MADISON COOPER.

### Advertising.

We have in hand, too late for publication in this issue, an unsolicited article entitled, "How an Amateur Feels About Advertising." He suggests that growers of commercial flower stocks are neglecting a golden opportunity by not properly utilizing the columns of THE FLOWER GROWER, not only during the selling season from fall to spring, but throughout the year. He also offers some concrete suggestions as to just what commercial growers should say in their advertising. It is really not altogether a question of telling about goods for sale, but the advertisers should tell about their business and methods of culture, etc. They should also tell about their own special varieties, not necessarily of their own origination, but those varieties that they know to be of special merit, so that readers of THE FLOWER GROWER may become familiar with them. This can be done during any season of the year so that when the actual selling time arrives, readers are acquainted with the new varieties and ready to purchase same.

This article is prepared by one who knows, who is really a purchaser every year and one who understands what train of argument appeals to the buyer. We think so much of the common sense of this little article, which comes unsolicited and is written by a man who is well qualified to offer suggestions from practical experience, that we propose to put it in type at once and send it to every advertiser, calling special attention to it. We also commend it to the attention of all readers of THE FLOWER GROWER. Those who are purchasers of flower stocks of any kind will do well to note the suggestions contained in this article. Amateur growers of today are the professional growers of tomorrow.

### "What's in a Name?"

One of our good friends writes us in well chosen words that he has found "Glad" growers splendid and friendly people and that he believes that there is something in the name which seems to filter into the constitution and disposition of the individual. Well, there may be something about growing the Gladiolus that makes people glad. We will admit there is no flower that will give more satisfaction for the amount of time and money expended and under such circumstances one who grows the Gladiolus is likely to be glad he undertook the work.



## American Gladiolus Society.

Earl S. Miller, Binghamton, N. Y., one of our members, is in the war. The secretary would like to have the names of others who have gone into any branch of the service.

Notices of the annual dues have been mailed to the old members. It would be of great assistance to the secretary if the members will send in their dues as promptly as possible. Any members failing to send in their 1917-18 dues and wishing to continue their membership in the society to participate in its after-the-war activities, should send in their back dues together with those for 1918-19. If the society is to continue holding annual exhibitions, it must in some manner raise funds for the premiums. Last year two hundred dollars was appropriated to supplement the premiums offered by generous donors. However the society cannot continue indefinitely to do this unless we can depend on a permanent and an increasing membership. War conditions are rapidly reaching a climax and when peace comes there will undoubtedly be an increased love of gardening. Will you help push the good work?

A. C. BEAL, Secy.

## Among the "Glads" in South Australia.

Mrs. Caley Smith of Aldgate, South Australia, entertained the members of the S. A. Dahlia Society at her nursery back in March. There was such a fine feast of bloom of different kinds that for a while nobody was able to concentrate attention upon any particular class. For the first ten minutes it was a case of a glance at a beautiful Dahlia, then a call to a glorious Gladiolus, and anon a view of the Delphiniums.

Mrs. Caley Smith has one of the largest and most complete collections of Gladioli, not only in South Australia, but also in the whole commonwealth, and a large proportion of the plants were then in bloom. Her "baby stock" comprised 120,000 corms, and in the "show" bed there were 20,000 separate plants.

In the latter case a novel, but exceedingly effective, scheme of staking had been adopted. In the past Mrs. Caley Smith made it a practice, where necessary to provide a support for each individual plant, which, of course, involved a large amount of labor, and some difficulty and expense in securing the stakes. This year she drove stout stakes into the ground at the end of the rows, and fastened to these lengths of fairly heavy fencing wire a single strand to each row—to which, all the stems inclined to be wayward, had been attached with raffia or other tying material. The result was most satisfactory from every point of view.

One of the most striking of all the "Glads" was *La France*, a magnificent variety carrying great flowers of crimson scarlet color. Although worthy a place in the most select company, for decorative purposes, this is not, however, what may be termed a "show flower."

*Intensity* is most appropriately named. The color of the flowers is purplish maroon, and I doubt very much whether a darker hue specimen has been evolved.

A seedling named *Helios* certainly merits

the association with the sun. One of its many admirers has described it as "scarlet, with orange tips and orange lips." Hitherto *Europa* and *Angelica Pooler* have been regarded as the purest and best whites on the market, but Mrs. Caley Smith, by using the former as one parent, has produced a flower which is like driven snow, and by comparison makes both *Europa* and *Angelica Pooler* appear to be cream.

*Lavendula Major* is a very attractive pink, *Pandora* as a deep maroon, would take a lot of beating, and the *Blue Bird* would win appreciation anywhere.—Extract from *The Observer*, Adelaide, Australia.

NOTE—The description of *La France* does not correspond with that given on page 373 of the Cornell Extension Bulletin II, but see note thereon. Neither is the variety mentioned in Lemoine's catalog No. 191. There was a *La Francaise* listed by Barr in 1913, which may possibly be the same as the *La France* of the C. E. B. *Europa*, I suppose we are all acquainted with, but *Angelica Pooler* I do not know. The description runs as follows: "A beautiful white raised by Dr. Pooler. Superior to any European white for vigor and habit of growth. The spikes often grow to a height of six feet, and produce ten to twelve blooms at one time. Flowers are large and of good form and correctly placed on spike"

"SMILAX."

## For Remembrance.

The sun streamed down quite warmly on the small garden plot and the busy figure in it. To and fro she went, so intent on her work that she did not notice her neighbor watching her over the low fence that separated the gardens. At last, hurrying up the path, she turned and met the interested eyes of the woman next door.

"Good morning! You are busy," the neighbor laughed. "I never saw any one so energetic."

"Well, you see, there's so much to do in so little time now," was the answer, as she paused, and pushed the old straw hat a little farther off her flushed face. "But I have nearly done now."

"I should never have the patience; and how on earth will you remember where you've put everything?"

"Oh, I have labelled them all, of course." She pointed out the little white flags everywhere, mentioning what was sown underneath. "I'm just finishing my last bed," she concluded.

"And what's that going to be?"

The woman stooped down to it, and began to use her trowel.

"Sweet Peas," she said and there was a subtle change in voice.

"Flowers;" well I am surprised. And vegetables everywhere else. Don't you think it is a waste of good ground?"

"Perhaps it is, but, you see, Jack and I always loved them. I carried a huge bunch at my wedding. Prize blooms they were, like wonderful colored butterflies. I can smell the honey-sweet scent of them now. And we've always had a patch of them in the garden. You see, Jack hopes to get leave in July, and I want him to know without telling him, that I haven't forgotten."

She looked up, and saw the reflective, speculative pity on her neighbor's face. Some of her color faded, and her brave smile grew a trifle mechanical.

And—and if he doesn't come," she went on, with a little catch in her breath, "there are always the hospitals, you know. They must have flowers."—*The Observer*, Adelaide, Australia.

## What is Advertising?

Advertising is the power of an idea multiplied  
But how multiplied?

By its continued use it becomes a force, more or less unconscious, yet at the same time growing in its purpose so that when the article or material you desire is needed, the manufacturer or dealer's name who handles or makes the object comes to you instantly.

When you can create this thought in the public mind you are advertising in the true sense and also getting proper results from the efforts made.

Publicity and advertising go hand in hand and, therefore, the advertiser who thinks in terms of publicity enters into a channel of broad business thoughts as, without advertising, your business is merely moving with the tide; but in these days of strenuous efforts we must move faster if we expect to keep up with the new stride now necessary to assist in doing our share so that the returns to the U. S. revenue coffers will put the florists' business on the level to which it is justly entitled.

To these progressive florists who pause and reflect before entering into an advertising campaign, whether it be large or small, I say, go to it now stronger than ever, regardless of the thought of not being able to get flowers enough to sell. If you create the demand for flowers you will find material to sell.

Be progressive and optimistic in your thoughts and action and the rest comes easy. Also, in these days of strife, we must learn the new curriculum and use instead of the three R's, as in the days of old, the three C's, Cool, Calm, Collected, and, being in this mood and using the modern weapon, "Advertising" to help your business, flowers ought to be in greater demand than ever, providing you adhere to it.

Make up your mind this season to try it out, stick to it persistently and success will crown your efforts.

By using our slogan, "Say it with Flowers," whenever and wherever possible, on all advertising of every character, whether stationary, in newspapers, or otherwise, its accumulativeness will bring you the desired effect.

HENRY PENN.

Chairman National Publicity Campaign,  
in *Florists' Exchange*.

## Hedges of Bridal Wreath.

Fourteen years ago I planted the first hedge of *Spiræa Vanhouttei* that was seen in this town, Eaton, O. That hedge is now about four and one-half feet high and as compact as could be desired. Dozens of hedges of the same shrub are now scattered along Main street and other thoroughfares of the town and stand from three to four feet high, according to the wishes of the owners. When in bloom, in late May or early June, they are exceedingly showy and they are attractive all through the summer. For years they have answered the purpose of a defensive fence.

A well developed plant of this spiræa, as a single shrub in a lawn, is beautiful when in bloom. It is one of the hardiest of shrubs.

California Privet formerly was planted hereabouts in considerable quantities, but it kills back so badly that it has lost its popularity.—E. Y. TEAS in *Florists' Review*.

## Legible Labels.

We are often asked how to make garden labels that will continue to be legible for more than a season. There are numerous methods in vogue, most of them, however, involving so much labor that they are rarely put in practice. Probably one of the simplest methods to secure legibility of wooden labels is to have them painted all over with white lead and thoroughly dried. Then before writing paint lightly a second time the surface to be written. An hour after the second coat is applied the surface may be written with lead pencil not too hard and the label allowed to dry. Labels prepared in this manner are extensively used in botanical gardens and last well.—*Horticulture*.

The article by Joe Coleman on the next page describing the construction of a small greenhouse gives information that many people would be interested in. Nearly all flower growers who have not a greenhouse aspire to sometime have one.

## A Small Greenhouse.

BY JOE COLEMAN.

[Written expressly for *The Flower Grower*.]

THE editor of THE FLOWER GROWER invites an article on the construction of a small greenhouse. The writer had a longing for a cheap but efficient house and set to work along such lines with the resulting building of a greenhouse 14 x 28 ft., without any frills, but that has been most satisfactory. That was four years ago and the cash outlay was about \$140, including heater and all, by purchasing second-hand pipe and doing most of the work myself. Of course, now such a house would cost a half more. Not being an expert with the mitre box, had a carpenter one day and the plumber the same length of time.

It is not so easy to make oneself understood without illustrating such an article with drawings, but will do our best in simple language and start from the ground up.

A solid wall would add expense, so after striking our levels—dug down at each corner a foot or such a matter and tamped in coarse gravel and then set up a building tile filling it with a one to four mixture of cement. Then proceeded to space upright tile at distances of seven feet in like manner, using in all twelve to go around the foundation. The front of the house had the two tile placed the width of the doorway apart. The top level of the foundation stood six to eight inches above the ground and the open space between each tile was filled with a 2 x 8 inch plank set edgewise making a tight but very inexpensive wall. It is well to add here that the sides and ends of the building were built solid, using cheap lumber, then covering with three-ply tar felt roofing. First built the frame as for any other building, using 2 x 4's for the sill and balance of the framing. Two cross braces under the V shaped roof and two iron posts together with the solid ends made the structure rigid and secure. The side walls were built 4½ feet high and to the apex of the roof was 9 feet.

You will thus see that only the entire roof space was glass. Such a house might be improved upon by adding glass in each end, letting in a little more sunlight, but the solid ends have served our purpose very well and the less glass area the less heat required to keep up the proper temperature within.

Furnished our planing mill man with patterns for plates and rafters and these were turned out of cypress "the wood eternal." (A greenhouse material company can supply rafters, etc.) Here's where the carpenter got in his work with the mitre, and after the rafters were placed it was a short job to do the glazing. Glass 18 x 18 inches was used. On alternate sides and hinged from the peak of the roof were two ventilators, using for this purpose window sash containing six 8 x 10 inch glass. By this time the building took on the appearance of a really green-

house and we were mighty proud of our humble effort. The entrance was cut to fit an ordinary pine door.

Did not care to attach the service room outside the building, so the pit was dug at the time the foundation was put in, directly inside the front entrance and walled up with strong boards. Such a pit may be built to suit one's convenience, in our case it was quite small because natural gas was used in the heater. For coal the pit would have to be larger. The pit was partially covered with a strong plank platform as this platform was part of the alleyway upon entering the building. Space is precious so the benches were built wide, quite high up, to insure getting all the sunlight possible, leaving a space two feet wide entire length of the building. At the location of the pit the benches were narrowed to give access to the heater.

The heating problem required a little study. A large size water-jacket stove was purchased and due to the pit being within the confines of the greenhouse the heat that generated therefrom was entirely conserved. Thus it was not necessary to wrap the heater with a non-insulating material. The expansion tank should be the highest point of the system so a new galvanized bucket came into use for this purpose. Now having placed the heater into position will attach an elbow onto the flow outlet and proceed with a two inch pipe placed perpendicular and running up to within two feet of the point of the roof. At the top of this pipe a T is placed. A round hole has been cut in the bottom of the improvised expansion tank, or galvanized bucket, as it were, and soldered to the top of the T. A two inch pipe running full length of the house is connected with the horizontal opening of the T. This pipe is given a slight fall to the opposite end of the house. An elbow is connected and a drop of two inch pipe perpendicular to a level one foot below the bottom of the benches. Then attach another T, and pipe therefrom running horizontally across the end of the building farthest from the heater. Attach five reducing T's at even spaces under the benches (five under each bench) and use 5 one inch pipes giving them a slight fall for the return to the heater.

We know this house as built to be somewhat crude but it has served our purpose well. Perhaps someone may get a few ideas from this short article to encourage the building of a greenhouse. If well blessed with this world's goods go to the greenhouse manufacturer, otherwise build a homely house as we have done. Nothing will afford so much downright pleasure and profit may be added as well. Nothing can be more cheery when twenty below outside than to bask in the sunshine under glass. Should we be so fortunate as to reach the Autumn of

life what fleeting happy hours may be spent among the flowers and plants in our little greenhouse!

### Flowers in War Time.

Food will win the war, but food is not the goal. It is only ammunition. This war is for the souls of people and of peoples. And while we raise potatoes and cabbages to feed the flesh, the spirit must not be forced to wait till the second table. The soul should sit at meat along with the body.

Shall we banish flowers from our gardens? Can we afford to cut music out of our war program? Cabbages are of the rank and file of the fighting forces, but poppies are the regimental band. Flowers are for solace in the serious business of hoeing cabbages and killing the worms thereon. Potatoes we need for food, but pansies we must have for thoughts.

It would be to Germanize our land, if we cut gay color out of our war gardens, and left the gardener only the drub business of serving tables. The wondrous structure of the cabbage may be worth long meditation; but we do not meditate upon it. The rose compels meditation. Flowers on the mantel are incense offered to the soul of the house—the Home. If Germany had thoroughly subdued America a home would not be needed. A house and a cabbage patch would be sufficient.

War is a sad business, but it needs no professional landscape crepe-hangers. Dots and dashes, belts and splashes of color are needed in our landscape more than ever. We owe a whole season of garden cheer to the eye of the passer-by in our neighborhood. Dooryard color is Red Cross bounty. It is first aid to the warsick mind and the broken spirit. By taking thought the householder can have a succession of color growing about his house from spring frost to autumn frost, and this without subtracting at all from the time he should give to the food garden. The heart will find spare moments for flower culture. Keep the home gardens blooming.—*Minneapolis Journal, Mar. 17.*

### The Popular Gladiolus.

If a vote could be taken to determine the most popular summer flower in our gardens, the Gladiolus would probably stand first. Its cultural needs are so easily met and the returns from the expense incurred in getting a stock, and from the space occupied in the garden, are such as to make it without a doubt everybody's flower.

It is one of the plants that has been wonderfully transformed by the hybridist, and to-day types and varieties are so numerous and so bewitching in their appeal that few gardens where flowers are grown are without them. As cut flowers they are of increasing importance and by making a suitable selection of varieties and planting in successive batches we may have a garden display from mid summer until frost. To my mind the loveliest of all are the *Primulinus* hybrids, a wonderfully fascinating group with their distinct hooded flowers of soft yellow and orange shades flushed with delicate pink and rose. Gladiolus *Primulinus* first flowered in cultivation at Kew nearly thirty years ago I remember seeing it grown in pots and flowering in one of the greenhouses there, and the impression it left on my memory was that of a very beautiful but rather fragile looking flower. Its home is in Tropical Africa, where it is described as growing in one of the wettest spots near the Victoria Falls "in a perpetual deluge," from which presumably it gets the name Maid-of-the Mist. To those men who saw its possibilities as a parent and have given us such choice and pleasing varieties we should be duly grateful.—*Gardener's Chronicle.*

## THE PEONY

### Selecting the Five Best Peonies.

Paper Read by W. F. Christman before Garden Flower Society.

HAVING SOMETHING over 125 varieties of Peonies growing in my garden, and broadly speaking there are about 500 varieties that are admirable for that purpose, you can readily understand that it is no easy matter to eliminate all but five that are best suited for the home garden. As personal opinions are so at variance I think it better that I suggest five varieties that I consider among the very best for the home garden. Among the many varieties now in cultivation, numbering in the thousands, it is obviously manifest that some possess more desirable qualities than others.

The Peony is one of the very oldest flowers in cultivation, written accounts of same going back to the year 77 A. D., but it has only been within the past fifty or seventy-five years that marked improvement has been made, due to careful hybridizing and pollenization. Some really marvelous creations have been developed within the past ten or fifteen years and within the next few years we will doubtless see many valuable and meritorious varieties propagated. A full double yellow Peony has not yet been secured, although Peonies possessing this color, to a great extent, are on the market.

As it takes a great deal of time and unlimited patience to develop new Peonies that are superior or equal to those now in cultivation, there will always be a demand for the newer and rarer sorts by those who are making large collections or desire to possess the finest sorts obtainable. One grower who has originated many fine sorts catalogued one of his late productions at \$50.00 each and sold a number at this price so you see it was a profitable venture for him. Many of the new sorts readily sell for \$25.00 for a small division of the root, and as most varieties multiply quite rapidly, a large collection of these rare sorts is a valuable asset.

What qualities are to be considered in choosing the five best Peonies for the home garden?

First, let us consider *period of bloom*. When gentle spring is ushered in and all nature seems to be bubbling with life and animation, we, who have patiently waited through the long winter months, gladly greet the earliest blooming Peony with considerable pride, for while it may not be the best, it is the best of its season and fills us with expectant pleasure of what we know will soon follow. Let us follow this early blooming variety with one that makes its appearance a little later in the season in a more dignified manner, having taken more time in preparing for the admiration that is sure to be bestowed upon it. In turn we will follow this with a more tardy arrival and last, but

among the very best, we have chosen one of the latest Peonies to bloom; one that appears on the scene, after most of the others have faded and gone. With judicious selection and careful cultivation one may have a succession of bloom for four or five weeks.

Second, we will consider *color*. This is a matter of personal taste and is so much at variance with different individuals that I have attempted to cover as wide a range of color as possible with the few varieties I have been permitted to name; bright mauve pink, white, ruby, red, pale lilac rose and rose white or flesh being the colors I have chosen.

As a third feature, *fragrance* is a most desirable attribute to any flower, and naturally appeals to one and all alike. It may be interesting to some of you to know that red Peonies, as a rule, lack agreeable fragrance, while many of this color have no fragrance at all. Fragrance is also found lacking in many single varieties. The full double pink varieties possess the most fragrance. Some of the double whites are exceedingly fragrant.

As a fourth requisite, let us consider blooming qualities. Only dependable blooming varieties have a place in a small collection. Some Peonies would be classed among the very best were it not for the fact that they are shy, unsatisfactory bloomers and not desirable for this reason. I have not given the single varieties a place on my list, and while some of them are very beautiful, they are not as lasting in bloom as the double varieties.

Classed in their season of bloom I wish to present the following varieties to you as my choice of five of the most desirable Peonies for the home garden:

First on my list is *Edulus Superba*, originated in 1824 by Lemoine. This is a bright pink flower, classed as mauve pink. It is universally admired by Peony lovers on account of its extreme earliness and delightful fragrance.

Next on the list is the universal favorite among the early whites known as *Festiva Maxima*. Although originated by Millez 67 years ago it still holds undisputed sway as one of the very best early whites. The delicate carmine edges to be found on some of the inner petals adds an air of distinctiveness to the flower that appeals to all.

For our third choice in order of blooming period we have chosen *Monsieur Jules Elie*, a very large flower of deep pink with silvery sheen. It is a strong grower, free bloomer and one of the very largest Peonies grown. This variety will create a desire to procure more of the higher type of Peony. This variety was originated in 1888 by Crousse.

For the fourth I have chosen *Felix Crousse*. This variety was originated by Crousse in 1881 and of its type and color it has no superior. It is a large, compact, globular bomb type, brilliant ruby red in color and, contrary to most reds, has an agreeable fragrance. It is a very striking flower and a mid-season variety.

The fifth and last one on the list is Richardson's *Grandiflora*, originated by Richardson in 1883. On account of the extreme lateness of this variety it is one of my favor-

ites. Its fragrance is pleasing and in color it is light pink or flesh tint. It is an exceedingly large flower, opening flat and full. It is a wonderful Peony and a gem in a class by itself. This variety is at its best after all the others named have faded and gone.

With the collection just named you have started a nucleus for future planting that I am sure will instill in you a desire to procure some of the rarer sorts, and you will find that the fascination for the flower will grow as years pass.

I have only chosen varieties that are moderately priced and within the means of all.

One may possess the finest varieties that are in existence but without proper cultivation the most satisfactory results cannot be obtained. The process of planting is simply a preliminary step if you would get the most out of your plants. While it is true Peonies will produce bloom with practically utter neglect, the results secured through proper cultivation and care are so gratifying that you will feel amply repaid for your efforts. They so readily respond to proper treatment that it is a pleasure rather than an effort to coddle them.

Now just a word about cultivation before I close. Peonies like rich soil but avoid placing manure where it will come in direct contact with the roots of the plant. Don't let the ground bake or become hard. Keep it well loosened up. Don't work too close to the plants if cultivating deep, as you are apt to injure the root growth. Peonies, as a general rule, are not bothered with disease like some of our other favorite flowers. They can remain for a number of years in the same location without being disturbed. Do not plant Peonies where Peonies have been removed unless new earth is substituted. Avoid planting under trees or in locations where the sun does not get a chance to penetrate. If you wish to cut the bloom for the house, do so just as the flower is unfolding, placing them in water immediately after cutting, but be sure that at least two sets of leaves are left on the stalk or stem from which the flower is removed. If you have a large number of plants or wish to secure large, exhibition bloom, disbud all but the central, or largest bud as soon as they have formed.

Let me urge upon you to try one or more of the varieties I have named, if you cannot find room for them all, and I feel sure that you will realize, as you have never realized before, what a lot of beauty will welcome you each successive year, and if some of you do not become Peony enthusiasts, I will miss my guess.

W. F. CHRISTMAN.

We have received from C. P. Hubbard, Los Angeles, Calif., a freak *Gladiolus* corm growing out of the side of the flower stalk about a foot from the ground. The variety is *Golden King* and the corm is three-quarters of an inch in diameter. While this freak is not unknown, it is not at all common and it may be caused by an injury to the flower stalk in cultivation or otherwise.

## W. W. Wilmore, Jr.

FLORIST, WRITER, SOLDIER.

Corporal William W. Wilmore, Jr., of Wheatridge, Colo., well known to readers of THE FLOWER GROWER for the valuable articles he has contributed from time to time, died in a military hospital in France on September 12th following an operation on a shrapnel wound. Corporal Wilmore was chief gunner in a machine gun company and had been through several great battles on the western front before receiving his death wound. He was married and leaves a wife and two children. He was about thirty years old.



W. W. WILMORE, JR.

Mr. Wilmore left Denver April 26 last, going to camp Funston where he remained only three weeks before going over seas. He was a crack shot and absolutely fearless, and was, therefore, pushed forward as a picked man for special service. We have not the details of his last action on the field of battle, but a letter from a hospital attendant states that he had a bad shrapnel wound in the abdomen and a compound fracture of the right arm with severe hemorrhage. The shrapnel wound was about one inch square and necessitated an operation. He died shortly after leaving the operating room, being very weak due to loss of blood and peritonitis resulting from the wound. He was operated on and cared for by Colorado men who did everything possible for him and gave him an honored burial.

The Great War thus comes home to Gladiolus growers, taking one who is well known to a wide circle of acquaintances through his valuable writings on the subject of his chosen life work. It is certainly to be regretted that a man so young and able should not have been spared to continue the great work which he had already started and pushed forward so far dur-

ing the brief period of his life. Had he lived there is no doubt but what he would have accomplished a very important work in the Gladiolus field.

Although making a specialty of Gladioli he had when working with his father, the great Dahlia specialist of Colorado, become familiar also with Dahlia growing and was well versed in this subject.

Under date of July 2nd we had an interesting letter from Mr. Wilmore written after he had been in France six weeks. At that time he had not seen front line service, but stated that he expected to be sent to the front at any time. He realized his danger as he wrote that he felt as though he would like to write us one more letter at least.

He wrote that he was very much interested in the native plants of both England and France and that he found many common plants growing wild that were listed among the cultivated flowers in the United States. He was gathering seeds of plants as he had an opportunity, using the tobacco sacks which the soldiers discarded for storing the seeds. Some of the things that he found he expected to work into shape when he returned. We had hoped for further letters from Mr. Wilmore, but it is probable that when he went on active service his time was so taken up that it was not possible for him to write.

Those who knew "Will" Wilmore personally, all know that he gave a good account of himself on the battle field. He was a man of exceptional energy and a man who threw his whole life into action for whatever cause he undertook and it is doubtless owing to this quality that he came to his death so soon. Men of this kind are always selected for the most difficult work and necessarily the difficult work is the dangerous work.

## The Hemerocallis.

[Yellow Day Lily.]

[Written expressly for The Flower Grower.]

BY BERTHA BERBERT HAMMOND.

The various sorts of Hemerocallis possessing as they do, so many commendable qualities, deserve to be more widely known and cultivated. They are perfectly hardy, strong growing, easy of culture and fine for massing in the hardy border or for planting among shrubbery. Once established they will practically take care of themselves and each year furnish a lavish display of large, showy flowers, ranging from lemon yellow to a deep coppery gold color.

If an early flowering Hemerocallis is desired, *H. Middendorffii*, a dwarf growing variety which bears in May, a rich chrome yellow flower, should be selected. *H. Thunbergii* is a late blooming variety which comes into flower just as *H. Flora* ceases to bloom. *H. Aurantica major*, one of the richest of the lemon colored day lilies, blooms during June and July. By planting different varieties together a succession of bloom from May until late in August may be easily secured. At the

present time, in front of my summer home is a long border (100 x 4 ft.) of magnificent *H. Dumortieri* aglow with hundreds of bright orange colored clusters, which, against their background of graceful, rich green leaves, make a most striking and gorgeous picture, commanding attention and eliciting the admiration of all beholders. Indeed, a more prodigal display of bloom can scarcely be imagined.

Perhaps the best known variety of Hemerocallis is *H. Flora*, commonly called *Lemon Lily*, which sends up during June and July, fragrant flowers of a lemon yellow color. But it is known to comparatively only a few flower growers, that this variety lends itself admirably to forcing for winter window culture. Plants potted late in autumn are left out of doors, and allowed to freeze, then placed in a cool cellar and gradually brought into light and warmth. Kept well watered, they grow and bloom quite rapidly, giving a maximum of pleasure and satisfaction in return for the care bestowed upon them. After blooming, if the plants are again placed in the cellar and bedded out in the spring, they will in a year or two, regain their vitality sufficiently to bloom out of doors in their season.

## Indoor Flowers in Winter.

The window garden for greenery, for flowers and for fragrance in the dreary winter time is a great addition to any home.

Preparations should begin at once if not already done. A sunny bay or other window may be provided, with shelving inside on which to place the pots. Favorite Geraniums or other tender plants from the outdoor summer garden may be potted, reducing the tops somewhat. These should be stimulated after potting by the use of liquid manure, or bone meal or other commercial fertilizer may be sprinkled on the soil in the pots. Tubs containing Oleanders, Rubber Plants, Palms, Ferns, etc., may also be moved inside to prevent killing by frost.

One of the easiest grown and most effective plants is the Narcissus or Daffodil. It furnishes pleasing green foliage and flowers at little cost. Take a bowl six or more inches across, fill half full of pebbles, place the bulbs, as many as will fill the bowl on the pebbles, keep water in bowl, covering the sides of the bulbs half way. They will soon send roots down among the pebbles, and their green tops, blooms and fragrance upward, helping to break the bleak monotony of the winter time.—JOHN S. KERR in *Progressive Farmer*.

## Royal Horticultural Society.

(London, July 30, 1918.)

G. Churcher, Alverstoke, staged a little group of very elegant Gladioli, all hybrids from *G. Primulinus*. The varieties *Alice Tiplady*, orange apricot; *Firefly*, deep scarlet; *Otranto*, soft yellow; and *Altair*, rich salmon pink, were especially charming. (Bronze Banksian Medal.)

Messrs. Alexander Dickson & Sons' display of Roses thoroughly merited the Gold Medal awarded. The varieties *K of K*, *Col. Oswald Fitzgerald*, *Mrs. E. V. Haworth*, *Sunstar*, *Red Letter Day* and *Elizabeth Cullen*, were all largely shown and effectively staged. In Mr. James Douglas' group of Carnations the varieties *Sweet Anne Page*, *Solfaterre*, *Edenside* and *Orange King* were of outstanding merit. (Silver Banksian Medal.—*The Gardeners' Chronicle*, London.)

## WAYSIDE RAMBLINGS

### GLADIOLI BALTIMORE AND SALMON QUEEN.

I make the following report in re-item *Baltimore* and *Salmon Queen* Gladioli in the August number of THE FLOWER GROWER:

Of 30 catalogs of reputable Gladiolus growers before me only eight list the variety *Baltimore*, two of these giving *Salmon Queen* as a synonym—Geo. S. Woodruff, of Independence, Iowa, and G. D. Black, of Albert Lea, Minnesota. One also gives *Hohenzollern* as a synonym of *Baltimore*—Maurice Fuld of New York City. None of my catalogs contain the name *Salmon Queen* as a separate variety. It seems to me but one conclusion can be drawn, that *Baltimore* is the varietal name with *Salmon Queen* and *Hohenzollern* as synonyms.

To clinch the matter. Referring to "Gladiolus Studies III.—Varieties of the Garden Gladiolus," by Alfred C. Hottes, issued as Extension Bulletin II, Cornell University, Ithaca, N. Y., page 293, you will find this information:

*Baltimore*—originator—Cowee, 1910, syn.—Formerly called *Salmon Queen* by Woodruff; and on page 424: *Salmon Queen*—(Woodruff). See *Baltimore*.

CHAS. E. F. GERSDORFF.

### EARLY GLADIOLI.

I have read the note in the October issue of THE FLOWER GROWER about early Gladioli and reference is made to some varieties that come a week or so later than *Pink Beauty*. I want to mention that *Pink Progression* is just as early as *Pink Beauty* as it is a sport of *Pink Beauty*, and a sport of any variety never differs in blooming time from the variety it comes from. *Pink Progression* is valuable as an early variety and it sells well as a cut flower in the city markets. The first fifteen dozen I sent in last spring on June 16th sold for \$1.20 a dozen. They were planted the 21st of April and I cut the first two dozen on the 10th, four dozen on the 13th, and if one plants good size bulbs they are certainly handsome. They are, with *Pink Beauty*, the first to bloom, and the color is so much better than *Pink Beauty* that they take better in the market.

JOHN ZEESTRATEN.

### LABELING GLADIOLI.

I have found nothing else so reliable as painted nurserymen's labels. These are factory painted, with copper wire to attach. They are convenient, cheap and the pencil marks last two years or more, and the wire indefinitely. The Benjamin Chase Co., Derry, N. H., or the Dayton Label Co., Dayton, Ohio, will doubtless either of them mail one hundred labels for a small sum. E.

### DEVELOPING A GLADIOLUS BUSINESS.

I have read in a recent issue of THE FLOWER GROWER a question asking for information about developing a Gladiolus business. It is, of course, pretty hard to suggest for all cases, but my way is to advertise in THE FLOWER GROWER and I have had good results. When inquiries are received they should be attended to at once and when a sale is made, the customer should receive exactly what he expects, or better if possible. Be sure to send all stock true to name if you want to continue in the business, and if a mistake is made (which may happen) be sure and make good the next season. If one follows up this practice he will surely get all the customers he wants in due time.

Never be stingy in the count as you might overlook a diseased corm and if a few extras are thrown in, there is no harm done. Also, give your customer full size. If he buys  $\frac{3}{4}$  in. to 1 in., give him more 1 in. than  $\frac{3}{4}$  in. Prompt attention to all inquiries and all correspondence is necessary to build up a permanent and satisfactory business.

### EXPERIENCE.

#### PROPAGATING LILIUM CANDIDUM FROM SCALES.

Answering your inquirer in the Oct. issue of THE FLOWER GROWER about propagating *Lilium Candidum* from scales: It is too late in October to start from scales as *Candidum* should be planted and up by then. The best way to do this is as soon as the scales come off the bulbs which is soon after digging, especially if they are kept dry, put them in boxes not too deep with soft earth such as comes out of flower pots, or soil which is used for that purpose, and keep them moist in a warm place and they start soon to make little bulbs at the bottom and will be ready in the fall to plant. This can be done in the fall of the year and they can be planted in the spring, but the results are not as good. Z.

#### TREATING GLADIOLUS CORMS BEFORE PLANTING.

I fear many growers both amateur and the trade do not practice treating their corms with formaldehyde as they should. When I grew Gladioli to a considerable extent we put the bulbs in gunny sacks and soaked them, I think, over night in a barrel of prepared liquid. I forget the formula for the mixture. Then suspending the sacks over the barrel until the dripping ceased, the bulbs were ready to plant. I think an article on the importance, method, formula, etc., would be helpful. E.

Note by the Editor:

Articles on this subject will be found in the May, 1915, and March, 1916, and May, 1916, issues of THE MODERN GLADIOLUS GROWER.

### TIME FROM PLANTING TO BLOOMING.

On the question of early blooming of Gladioli, Mr. A. J. Thompson is to be congratulated. He has me beat with his *Queen of Pinks*. However, his *Pink Beauty* seems to have taken an unusually long time to bloom, March 13 to June 15 being 94 days.

Here is a report of my early bloomers. All were planted May 5:

<i>Chiffonette</i> (Kunderd)	bloomed July 12	69 days.
<i>Morning Star</i> ,	" "	10-67 "
<i>Magic</i> (Kunderd)	" "	13-70 "
<i>May Toy</i> —Prim. Hyb.—(Spencer)	bloomed July 13-70 days.	
<i>Rose Glory</i> (Kunderd)	bloomed July 16	73 days.
<i>Cinnamon Bear</i>	" "	17-74 "
<i>Roanoke</i>	" "	18-74 "
<i>Avalon</i>	" "	18-75 "
<i>Peachblow</i> (Cowee)	" "	19-76 "
<i>Mary Stewart</i> (de Groat & Stewart)	July 19	76 days.

All of these have had no special culture, not even a cultivation of the top soil, however, in lieu, they have received a top dressing of old manure from the field.

I have the species *Quartinianus*. Planted this indoors Feb. 1, transferred same to the garden May 5, without disturbing the plant. It bloomed July 20, requiring 169 days.

CHAS. E. F. GERSDORFF.

### Short Hills' Dahlia Show.

The tenth annual Dahlia show of the Short Hills, N. J., Garden Club was held Saturday, Sept. 28th. The show was most creditable and the new seedlings especially interesting. The club has made a study of hybridizing with most satisfactory results. The American Dahlia Society's Silver Medal was awarded to Mrs. Chas. H. Stout for a new seedling to be named *Emily D. Renwick*. This is a decorative Dahlia, the petals slightly quilled and frilled of a clear rose color, the depth of the petal tinted lighter, giving the bloom a transparent appearance. The stem is strong and the bloom about 6 inches across. An interesting lecture was delivered by Prof. W. A. Orton, Dahlia expert of the United States Department of Agriculture, describing a new method of Dahlia culture.

### Catalogues and Price Lists.

V. Lemoine & Son, Nancy, France—51 page catalogue printed in English of the Lemoine specialties consisting of greenhouse plants, Ferns, Shrubs, Peonies, Lilacs, Delphiniums, Phlox, Gladioli, etc.

Jelle Roos, Milton, Mass. Special trade list of Gladioli embracing many of the standard varieties together with some of the newer introductions. Also special trade list of planting sizes and bulblets, fifteen varieties.

Wayside Gardens Co., Mentor, Ohio.—Fall trade list of leading plants and bulbs, 12 pages.

T. H. Fuller, Battle Creek, Mich.—1919 wholesale list of Gladioli.

John Lewis Childs, Flowerfield, I. I.—The standard 16 page Childs trade catalogue and price list of practically all of the best standard sorts and many novelties. Some fine illustrations of some of the most striking sorts. Prices quoted by the dozen, hundred and thousand. Also lists Cannas, Dahlias, Hardy Perennials, Irises and Peonies.

Chautauqua Flowerfield Co., Bemus Point, N. Y.—List of standard American varieties with many foreign specialties, including *Primulinus* Hybrids, priced by the dozen and by the hundred.

## The Glad Philosopher's Musings.

Here in democratic America, where public men are considered as mere servants of the people and not their rulers, great liberties are taken with their names, and every popular president of the United States has had vast crops of babies named in his honor by faithful adherents of the winning political party. Lacking offspring eligible for christening, some of these enthusiastic admirers have honored instead their domestic animals, and so many a dog of both high and low degree has gleefully wagged his tail and bounded forth to meet his master at the call of "Abe" or "Teddy."

Breeders of flowers have a distinct advantage over parents of children in the matter of naming offspring. The proud father who selects some such heroic name as Hannibal, or George Washington, or Grover Cleveland for his new-born son may live to see him grow up to be a mollycoddle, but he cannot be censured for having taken a chance in hopefully bestowing a name worthy of a manly man. The christener of the flower is already acquainted with every characteristic of his creation, and so has no excuse for deliberately handing out a misnomer.

Disseminators of new varieties should not be in too big a hurry to name them, and should be considerate enough to refrain from adopting for mediocre varieties names that are only fitting for those of pronounced merit. The great war our country is now engaged in will bring into prominence certain heroes to be honored, and there will be probably altogether too much haste on the part of some well-meaning but over-impulsive hybridizers to rush in and appropriate great names for new seedlings that in some cases should never have been named at all. To name any flower not prominently bold in type, or whose bloom is not distinctive, or one that has any considerable amount of white or yellow color after any distinguished American army general, is sentimentally incongruous and, to say the least, most inappropriate; and it probably should be considered a duty incumbent on the various nomenclature committees to refuse to sanction priority for names of persons great in public life for varieties that are conspicuously unworthy of such high honor.

There is considerable commercial value to a popular name. Our government forbids the use of our country's flag for commercializing in business. Should not our country's heroes also have protection? Common courtesy at least demands that their names be not used without their consent.

Did you ever notice how a stranger can come into a community and im-

mediately climb into a social position for himself and family that they never could have attained had they been born and reared there? There is often a tendency for too much haste in bestowing honors upon seedlings that have not as yet stood the test of time and fully proved their merit.

THE GLAD PHILOSOPHER.

To secure the best germination from *Gladiolus* cormels they should be separated from the corms as soon after digging as possible. The cormels should not be allowed to become dried whereas the corms should be moderately cured or dried before storage. Therefore, the sooner they are separated after digging the better. The bulblets are best stored in moist sand or sandy earth.



A Daffodil planting on a country estate near Cincinnati, Ohio. Those in the foreground are *Mrs. Langtry* while those in the background are *Stella* and *Duchess of Brabant*. The owner hopes to naturalize the Daffodil to his surroundings and climate.

The owner of this country place writes us that during the Daffodil season in the spring of 1918 he opened his place to the public and collected nearly \$1600 which was turned over to the Y. M. C. A. war fund. This was arranged by making it known through the columns of the newspapers that the grounds would be open to visitors for four days during the height of the Daffodil season for an admission charge of \$1.00 which included the serving of a lunch of tea and cake, the gross receipts to go to the Y. M. C. A. war fund. Besides the money collected for admission several hundred dollars' worth of blossoms were sold at a price of from 25c.

to 75c. per bunch of 25. In spite of the fact that the weather on two of the days set apart for the opening was inclement and the further fact that the opening of the Liberty Loan drive occurred about the same time, the sum realized was considerable and visitors were well pleased, a number of them coming out a second and a few of them, the third time. We publish this information hoping that the suggestion will prove useful to others who have interesting country places where money could be raised for a patriotic purpose as well as much good accomplished in an educational way by allowing the public access to same.



[This department of THE FLOWER GROWER is intended to be one of its most helpful and valuable features. All questions asked in good faith and which are of general interest will have careful attention. The full name and address of the writer must be given, but not for publication.]—EDITOR.

**Transplanting Lily of the Valley.**

TO THE EDITOR:—

I am asking you as editor of THE FLOWER GROWER to kindly favor me with an expression of your opinion as to the best time to transplant Lilies of the Valley. Our present bed on the north side of the house has become crowded and for the benefit of some of our friends who wish to transplant some of the plants which must be removed to thin out, as well as my own information, I would greatly appreciate any suggestions you may offer.

W. F. H.

*Answer:*—In our section the leaves of the Lily of the Valley are beginning to turn brown (last of August) which indicates that they have reached the dormant state. The earlier they are moved after they have quit growing, the more time the pips will have to firmly establish themselves and the better they will do the next year. My bed was so crowded this year that the blooms were not as good as the year before, and I intend to thin them out and replant the bed within a few days; just as soon as the time can be spared. Moving them at this season, the pips should not be exposed to the air more than is necessary. My bed is 60 feet long and I expect to go over it in sections, taking at one time only what I know I will have time to dig, thin and replant.

H. W. M.

**Gladiolus—Twentieth Century.**

TO THE EDITOR:—

Several growers list a variety called *Twentieth Century*. Will you please let me know what it is like and who originated it?

C. M.

*Answer:*—*Twentieth Century* is a deep red, Mr. Wilmore describes it as blood red. It is almost as large as *America*, and a week to ten days earlier—a good cut flower kind, and the bulbs are usually round and thick (plump and bright tan) making a good bulb for counter trade. Do not know who was the originator.

E. M. HOYT.

Statement of the Ownership, Management, Circulation, etc., required by the Act of Congress of August 24, 1912, of THE FLOWER GROWER published monthly at Calcium, N.Y., for October 1, 1918.

STATE OF NEW YORK }  
COUNTY OF JEFFERSON } ss:  
CITY OF WATERTOWN }

Before me, a Commissioner of Deeds in and for the City, State and County aforesaid, personally appeared Madison Cooper, who, having been duly sworn according to law, deposes and says that he is the Owner of THE FLOWER GROWER and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date

shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:  
Publisher—Madison Cooper, Calcium, N.Y.  
Editor—Madison Cooper, Calcium, N.Y.  
Managing Editor—Madison Cooper, Calcium, N.Y.  
Business Manager—None.

2. That the owner is Madison Cooper, Calcium, N.Y.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are:

None.  
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

(Signed) MADISON COOPER.

Sworn to and subscribed before me this 27th day of September, 1918.

[Seal.]

(Signed) KATHARINE B. MERRITT.

(My commission expires March 31, 1919.)

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 We have had a fine growing season, and have a large supply of the standard varieties, and most novelties.  
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# THE FLOWER GROWER

FORMERLY

## THE MODERN GLADIOLUS GROWER

Volume V  
Number 12

December  
1918

FOR BOTH AMATEUR AND PROFESSIONAL  
GROWERS OF THE GLADIOLUS, DAHLIA, IRIS, ETC.

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### Potted Plants as Wartime Christmas Gifts.

BY BERTHA BERBERT-HAMMOND.

[Written expressly for *The Flower Grower*.]

**A** GIFTLESS CHRISTMAS! that, indeed, would be contrary to tradition and really seem like no Christmas at all! As Charles Dickens so aptly expresses it: "I have always thought of Christmas as a good time, a kind, forgiving, charitable time, the only time I know of in the calendar of the year when men and women seem by one consent to open their shut-up hearts freely. I believe it has done me good and I say 'God bless it.'"

Yet, with the ever increasing cost of the necessities of life and the constant and unexpected demands upon the purse, many persons who would like to open up their hearts freely, are confronted with the problem of providing a suitable expression of the Christmas spirit, with the small margin available this year, for the purchase of appropriate tokens of the good-will which they feel. But after all, it is the kind thought of the giver and not the intrinsic value of the gift that counts. "Kind thoughts make Christmas," and so with a little forethought, those who love to grow and care for plants have it at their command, though the purchasing power of the dollar has shrunk to less than half its value, to make one dollar do the work of two, by planning to grow and use as Christmas gifts, potted plants. And what could be more symbolical of the Christmas idea of life, hope and good cheer, than a living, blooming plant? What gift could be more charming or appropriate?

Who giveth flowers to feed the soul with joy  
As they unfold, doth richest gift employ.

—[John Calvin Rose.]

In order to feel reasonably



GLADIOLUS—AVALON.

Introduced by A. E. Kunderd in 1916. It is of the Kunderdi type and has a strong, large plant growth with flowers of very large size and beautifully ruffled.

The color is a snowy white with a cloud of softest blush over-spread, and the throat is as beautifully marked as *Mrs. Frank Pendleton*. Mr. Kunderd describes it as having the general effect of a very choice *Azalea* or *Rhododendron*, and as one of the most beautiful of the show Gladioli.

certain that the gift plant will thrive after it has been presented and probably keep over for several seasons, it is necessary to select for the purpose, a plant that is of easy culture and that is likely to withstand the many adverse conditions of room culture. Most of the potted plants offered for sale at Christmas, and which are forced especially for the holiday trade, are very exacting in their cultural requirements, and are totally unfitted to flourish in the close, hot, dry atmosphere of the average living room. That is why, when removed from the cool, moist, even greenhouse atmosphere, many a lovely and expensive gift plant soon perishes.

The Christmas coloring of the Poinsettia is exquisite. The brilliant red of the bracts that surround the clusters of florets, in combination with the handsome foliage, make this plant an unusually effective and popular Christmas gift. The plants can be grown from seeds or from "heeled" cuttings, but they require ever watchful care to raise successfully. They must be watered and cared for regularly and are very sensitive to cold; a sudden change of temperature alone, often resulting in the drooping of the beautiful foliage that is half the charm. Unless one is the fortunate possessor of a well regulated greenhouse, the Poinsettia, and that equally popular but delicate Christmas plant, the beautiful "Gloire de Lorraine Begonia," are rather too difficult for the amateur to grow with favorable results. There are, however, numerous other varieties of handsome Begonias,

(Concluded on page 126.)

## A Beautiful Spirea.

(Reprinted from *The Gardeners' Chronicle of America*.)



Flower umbels of Spirea  
*Van Houttei*

Of all the Spireas commonly available, the palm for beauty and utility should go to the *Van Houttei* variety. It is the most beautiful of the rather large family, and unquestionably the best for use on home grounds. In habit it is extremely graceful, reaching a height usually of six feet, its long branches drooping gracefully at blooming time with a wealth of bloom.

This Spirea is also known as "Bridal Wreath," a name which admirably describes it, for certainly no bridal wreath could be handsomer in beautiful simplicity than a spray from this beautiful shrub. Its flowering season is May-June, coming in as the greatly popular Forsythia, or Golden Bells, one of the earliest flowering shrubs, is going out of bloom. The tiny white flowers are carried in umbels about two inches across, closely set from base to tip of the branches. The golden centers of the little flowers when newly opened add to their collective beauty.

Not only for the beauty of its flowers does the Spirea *Van Houttei* take front rank among flowering shrubs. From the standpoint of utility it is also a leader. It is splendidly adapted to use as an informal hedge plant, is an admirable lawn subject, and is just as much to be desired in the shrub border. Besides its flowers, it is conspicuous through its handsome foliage, which retains its fine appearance throughout the summer, the color dark green above to pale bluish green beneath, reddening somewhat towards fall.

Spirea *Van Houttei* never runs riot, indeed, it is one of the most practicable of shrubs. It requires little pruning except to preserve form of growth or to confine it. The pruning season is just after flowering has passed. On no account should pruning be practiced

in late Summer or Fall, because it flowers in Spring on the growths made in the previous season. When pruning it is advisable always to cut out the old wood, however, as nothing is to be gained by keeping it.

Few shrubs are more hardy in our country than this Spirea, hence the possibility of its wide use. It is important when purchasing stock to see that what is procured is true to name. There is another variety which somewhat closely resembles it, one known as *Cantoniensis*, or *Reevesiana*. It is not as handsome as *Van Houttei*, and is only half



Spirea *Van Houttei* as a lawn shrub.

hardy in the North. Like the other shrub varieties of Spirea, *Van Houttei* is not very particular as to soil, doing well in any moderately moist location.

Propagation is usually effected through hardwood cuttings.

Gladiolus growers in the middle west report fine weather for digging whereas we understand that those in the east have had a cold and damp time of it. Anyway, hard freezing weather has held off pretty well, and practically all stock was out of the ground before November 1st. The quality is reported as exceptionally good.

My only objection to growing Lilies, Gladioli and Dahlias, is that they usually need staking and I object to the conspicuous way in which the stakes show. Of course, I wouldn't be without these grand flowers even if I had to put up with the objectionable stakes. In the past I have used the bamboo stakes, that can be bought at most of the seed stores, and while they have some advantages over the usual rough stake, yet they failed to exactly suit. The past season I gave the subject some thought and finally devised a stake that seemed to answer my purpose, at least. The stakes of course, are of different lengths to suit the heights of the different flowers and the size of the stake

will depend on the length. For a five-foot stake I found three-quarters of an inch square about right. At some near-by saw-mill, waste material can usually be found that will answer the purpose first rate and may be had for very little money and sometimes for only the trouble of carrying them away. I next bore small holes beginning near the top and about 8 or 10 inches apart, down to about the middle of the stake. After sharpening the bottom end so it may be driven into the ground easily, I next paint the entire stake green and lay away to dry. Instead of using string to tie the plants to the stake I use green raffia, being more inconspicuous than the former. I at one

time used tacks or small nails to keep the raffia from slipping down but found them more or less in the way and they were continually catching on different things. The holes have no bad points. If the stakes are stored under cover during winter and occasionally re-painted there is no reason why they won't last for a good many seasons.--  
WALTER J. WAIT in *The Garden Magazine*.

Here is one man's impression of the Buffalo show of the American Gladiolus Society last August:

"I spent most of my time steering people around and answering their inquiries as to where Mr. Groff's exhibit was; or John Lewis Childs' or Mr. Kunderd's; or where the flower was that took the prize; and what was going to be done with the flowers after the show was over; and what was the name of that pretty red one on the table over in the next room; and did they mix if they were planted too close together; and how Jelle Roos pronounced his name, and was Buffalo going to have another show next year; and what made Kunderd ask so much money for his bulbs; and were they worth it; and how should the word Gladiolus be pronounced; or was it Gladiolis, and so on.

The great loss of Gladiolus corms and other flowering bulbs by frost last winter should be remembered and care exercised when the coldest weather comes. Get a reliable thermometer.



Spirea *Van Houttei* used as an ornamental in group planting.

# Hybridizing and Crossing the French Iris.

BY WILLIAM ROLLINS.

(Reprinted by permission from *Horticulture*, Boston.)

## PREPARING A GARDEN.

We were speaking of raising new flowers and you said there would be more hybridizers among gardeners if simple well illustrated descriptions of how to treat the common garden flowers were easily accessible. In this letter an attempt will be made to remove this difficulty, for one of the most common, the Iris. No attempt at originality is made, nor will authorities be cited. In the dealers' catalogues the ordinary form of Iris is called German Iris, to distinguish it from the Japanese, the Spanish, the English and others. The designation German is a mistake, and should be abandoned. As this flower is the "bearing" of the royal house of France, the name French should be used instead of German.

For ordinary use the terms *Fleur de lis* or *Lilies of France* are desirable. I prefer the latter, for it suggests the loveliness of lilies and the grace of the French, qualities combined in a high degree in the flower. Giving the plant its right colloquial name is now of importance for we are brothers with the French in the struggle against that savage ethical code of the Hun overlords. The Iris is truly Everyman's Orchid. It equals the Peony, the Lily and the Rose, yes, even surpasses them in ethereal loveliness. These require rich soil, great care and skill. The Iris will grow in gravel and flourish under the unskilled and intermittent care of children. Some varieties have a perfume of surpassing delicacy. What more can be asked of any flower? When a plant has such charming qualities we cannot have it in too many varieties. Already there are on the market several hundred, and a few almost perfect ones; yet there is always a chance to breed others surpassing the finest; the family is composed of so many unit characters new combinations may be very great.

## PREPARATION OF THE HYBRIDIZING GARDEN.

The directions in this letter are applicable to the glacial drift soil of New England. In more favored regions this amount of preparation might not be necessary. For a one man garden, where Iris is not a specialty, five or six thousand square feet are enough. Make the garden long and narrow rather than short and wide. One hundred by fifty feet is a good size. This size will give pleasant occupation and at crossing time, lasting here three weeks, you can find interesting work three hours a day.

## PLOWING AND CULTIVATING.

Plow as soon in spring as the soil is in condition. What is more beautiful after the long winter of the north than the warm earth as it rolls, shining and smooth from the polished steel, suggesting the coming of new life, green

fields and blossoms? Get out muck from some depression in a deciduous forest, into which the leaves have washed for ages, waiting for your coming, that they may be turned into lovely flowers. Spread six inches deep over the plowed area. On top put one ton of ground limestone. Horse cultivate once a week to keep down weeds. Early in this letter it was written Iris would grow in poor soil, but for a garden where we want to try for mutants or where crossing is to be done, much care should be given to the soil. Make it rich, light, and just moist enough. As some seasons are very dry and hot, arrange to have water run between the rows. Heat and dryness may shorten the blossom season one-half, yet we are told the garden Iris likes to be baked. It really likes ideal weather, and soil just moist enough that when taken in the hand and pressed together, clings lightly. This does not refer to the Japanese, which should be flowered in water but drained after blossoming, or to the water Irises.

## PREPARATION THE NEXT SPRING.

In May, of the year after the first plowing, replot, harrow and spread on a thousand pounds of the following plant food. Slag phosphate—750 lbs., the best sulphate of potash you can buy—225 lbs., permanganate of potash—25 lbs. Harrow until dirt, muck and chemicals are well mixed. Cultivate, to keep down weeds until planting time. The first week in August plow trenches lengthwise of the garden, running the plow both ways for each. Make them four feet apart. Rows with so much unused land seem wasteful of space and fertilizer. If the rows are nearer, the whiffletree of the cultivator in swinging from side to side will surely break off some of the flower stalks and later valuable seed pods. Its name—whiffle (meaning to sway from side to side), shows this. The ends of this bar, generally of wood, should be sloped backward, rounded and polished, that in striking a stalk it may slip past, displacing, not breaking it.

## PLANTING.

Before planting cut the leaves to within six inches of the rhizomes. Set the plants from one foot to eighteen inches according to the kind of growth they will make. Press the soil about the roots, with the feet, leaving the rhizomes two inches below the surface. Many years ago, someone seeing a matted and old bed of Iris, with the rhizomes half out of the ground, thought this was the way Iris liked to grow. This idea getting into garden literature, and dealers' catalogues, stuck there. Really the appearance was a sign of a neglected bed. Always transplant before this state is reached. Rows should be kept narrow to ensure quick weeding. Matted rows are a

nuisance and an expense. In bending over the outside stalks in weeding or crossing to reach the plants inside, some of the outside flowers and later, some of the valuable seed pods will surely be broken off.

A garden for crossing is a distinct proposition from an artist's garden, where flowers are grown in great masses of one color, different colors being grouped to produce a harmonious effect. Such gardens are indeed art as much as painted pictures. Some of the great gardeners produce wonderful effects in this style. Such gardens require much labor and are expensive.

[ To be Continued. ]

## Bound Volumes as a Reference Library.

The four bound volumes of *THE MODERN GLADIOLUS GROWER* (1914 to 1917 inclusive) contain more useful information regarding the *Gladiolus*, its culture, history and improvement than can be had from any other source. These four bound volumes also contain much useful information about other summer-flowering plants, but the *Gladiolus* is especially well covered. These volumes contain the W. W. Wilmore, Jr., articles entitled, "The *Gladiolus* Manual." All information is quickly available by means of an index in each volume, and those who are interested in studying the subject cannot afford to be without these bound volumes. There has been no advance in the price. We are still furnishing the four volumes postage prepaid for \$5.00. Furnished separately at the same rate, \$1.25 each. Those who are interested in studying the practical and scientific features in connection with growing *Gladioli* should surely have a complete file.

## Gysophilas.

The sprays of the well known "Baby's Breath," *Gysophila elegans*, are light and airy and of great value in bouquet and design work. There is a double form, which is best propagated by division of the roots or by cutting the roots in pieces and starting them in sand under glass in the same way as *Anemone japonica*. Seed of the double form is sometimes advertised and a small proportion will come true. Occasional doubles may also be expected from sowings of the single form. The double variety has a much whiter appearance than the single and is preferred in the wholesale flower markets.

It is well to plant *Gysophilas*, especially the double ones, on land with a gentle slope. Some growers lost a number of their plants last winter on level ground. Thorough drainage being given, severe cold will not harm them. A sowing of *G. paniculata* can be made advantageously now. The dwarf creeping form, *G. repens*, is a splendid subject for the edge of walks. It is earlier than *G. paniculata* and has larger, pearl-white flowers.—*Florists' Review*.

## The Flower Grower

PUBLISHED MONTHLY ON THE FIRST OF THE MONTH BY  
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OUR MOTTO:  
*Special favors to none, and a  
square deal to all.*

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Vol. V

December, 1918

No. 12

"He who sows the ground with care and diligence acquires a greater stock of religious merit than he could gain by the repetition of ten thousand prayers."—ZOROASTER.

### How an Amateur Feels about Advertising.

I have been interested in the growing of Gladioli and other flowers for a number of years and belong to that large class where individual orders amount to only a few dollars, but the aggregate runs into thousands. I believe I am fairly representative, and I don't lose my interest in flowers after the planting and blooming seasons are over, or when winter snows cover the ground. In fact, that is the time when I get out my catalogs and lay my plans for the next season.

My interest extends not only to flowers, but to the men who grow them for the market. I'd like to know something of their acreage, the varieties they are growing, their methods of cultivation, harvesting, storage, etc. Why don't they tell us something about these things?

If I were a large grower, I would take large space in THE FLOWER GROWER and fill it throughout the year with matter that would not only be of great interest to the amateur grower, but would make him feel that he was acquainted with me and owed me some good will, and I am sure the additional expense would much more than be made up by the returns.

When a new variety is shown in the spring advertisements, it is a stranger to me. I have already arranged my schedule and a new variety calls for a special appropriation—the chances are that I pass it up. Now, if along through the year the originator of the new variety had mentioned in his advertisements that he expected to market it the next year and would devote a few words to description of its habit of growth and characteristics, it would be an old friend of mine by spring and a sum would be set aside for its purchase. There is also much that could be told about the older varieties, and pictures of the blooms and the plants in the field would influence many sales.

A half-page, for instance, would give the grower ample room and he is in position to furnish matter that would rival in interest anything to be found in the reading pages. There are a thousand and one things that the amateur would like to know, but which are such every-day matters to the grower that he fails to appreciate what fine indirect advertising their presentation would be.

The whole psychology of successful advertising lies in the seller's ability to see things from the buyer's point of view. It is a safe bet that if some grower would give us what we want, we amateurs would read his advertisements before we consulted the reading pages.

HARMON W. MARSH.

### France and Flowers.

If we may judge by what is written about the experience with flowers of our soldier boys in France, our boys on their return home will be ready converts to floriculture. One soldier boy, whose letter we read, stated that the gardens of France were three-quarters flowers and one-quarter vegetables. We suppose that he did not mean this literally, but the flowers looked so good to him that the vegetables seemed to be small in proportion.

France has taught the world a lesson in fortitude which will not soon be forgotten. France has also taught the world a lesson in floriculture in war-time which the world should not be slow to heed. All who have visited France during war-time speak of flowers—flowers everywhere. Possibly the flowers may have had much to do with the courage and splendid fortitude displayed by the French nation during the four years of terrible warfare which they have experienced.

Anyway, those of our boys who have seen service in France will return to America fully imbued with the idea that flowers have a distinct purpose in life not at all related to mere display. Floriculture is surely due for a big boom.

MADISON COOPER.

### Holland Bulbs for 1919.

We understand that the Dutch government compelled all growers of bulbs in Holland to reduce their stocks, including Gladioli, one-third. Besides this we also understand that the labor situation in Holland has been so difficult and the financial situation so stringent that comparatively few Gladioli have been grown there during the past two years, especially during 1918. It seems, therefore, altogether probable that the importation of Holland bulbs (providing of course that transportation and custom difficulties are overcome) will be extremely small between now and the planting season of 1919.

The war being over now there will be no submarines to interfere with shipment and the German declaration that bulbs were contraband of war is not now effective, but just the same there are transportation difficulties, and it takes time to arrange for shipments and it is improbable that any large stocks of Holland bulbs will come forward. However, it is quite a long time between now and planting time, and it is possible that the Hollanders will be able to land their stocks in this country, what little they may have to spare, if they so desire.

Some of our readers may think that Mr. Kunderd is getting more than his share of publicity for his varieties on our front cover page. Well, Mr. Kunderd has supplied us with some fine photographs. We would be glad to do the same for other growers with varieties of merit. Good photographs of meritorious and well known varieties are hard to secure and we are always glad to use them. There is no objection to illustrating meritorious varieties even though not well known, but it is not our purpose to give publicity to varieties not already introduced to commerce.

## MRS. AUSTIN'S TALKS

[Written expressly for *The Flower Grower*.]

### Cleaning Gladiolus Bulbs.

IN THOSE DAYS of long ago when Gladiolus gardens were scarce, my neighbor and I dug bulbs with a fork and spread them on blankets, and sometimes on canvas taken surreptitiously from the grain binder in the tool house. We had early learned that bulbs could be cleaned easier and quicker when cured, so we spread them in the sunniest spot and when they were well dried, we tied strips of stout cloth around our fingers to prevent them from getting sore, and sitting on the ground pulled off the roots leaving the bulbs smooth and clean. If one of us stopped working and crooked a finger in weird and questionable fashion, it was not an invocation to unseen spirits or to the adorable Flora; it only meant that the string was too tight. We were seldom alone. The family cow staked in nearby late clover watched us in mild disgust—she had tasted bulbs and the memory of their flavor was not



watching the balloons which are so very plentiful in this section. The large dirigible which is a frequent visitor is of special interest. An old friend is the driver and a halloo from the sky in a familiar voice is not uncommon.

Each year there were more bulbs to dig and more bulbs to clean and it became later each fall before they were finished, so when those cold days, the foretaste of winter's chill, came, we moved them to more sheltered places. We spread them in granary, in corners of the tool house, and very choice, washed bulblets in the big store room on the floor, while in the wood-house, where we could watch and stir them more easily, we tumbled them in heaps. Our mascot and her family also moved to the wood-house and the one who ventured there in evening without a light risked losing his equilibrium or the wrecking of his nervous system when he chanced to step on rolling bulb or velvet paw. This caused the man-o-the-house to remark that he didn't believe that there were so many bulbs in the whole country, and "What are you going to do with them, anyway?" "All sold, dear, excepting the planting stock, and they pay better than potatoes. I wish we had some tables to clean the bulbs on."

Then man power entered and the business was placed on a better working basis in the provision of good, frost-proof, airy storage room. Suitable curing trays and convenient cleaning tables. The illustration shows one of the tables. It measures 6 ft. long, 4 ft. 2 in. wide, 27½ inches high, and is so constructed that it can be folded when not in use. A narrow strip on the sides which comes ¾ inch above the table prevents the bulblets from rolling off. This size accommodates six persons, but whether one, two or six work there, it is a wonderful convenience. The grower who has only a few bulbs will find it handy to spread, perhaps, his entire stock there, and as the topmost ones become dry he can clean and push them to one side until they are all finished when they may be spread more evenly to finish curing, thus eliminating the curing tray. With the bulbs cured and stored away, the table may be folded and set up edgewise taking very little room, or it may be used for many other purposes, Dahlias, Cannas, or beans. In fact its uses are so many that it should be called a garden table, for one who has either vegetable or flower garden or both will find it a great convenience.

We husk bulbs now, and a "husking bee" in these days might mean a company of merry workers sitting at tables cleaning Gladiolus bulbs, using metal corn huskers to loosen and pull the roots from the bulbs, as well as to protect the hands.

MRS. A. H. AUSTIN.

### Connecticut Fair Flower Show.

The Connecticut Fair Association held its eleventh annual fair at Charter Oak Park, Hartford, Sept. 2-6 with all departments larger and better than ever. Especially was this true of the Flower Department under the able supervision of Mr. Gurdon R. Scrivener of "The Tunnel Greenhouses," Hartford.

The fine groups of Palms, Ferns, Geraniums, Heliotropes, etc., made a good surrounding for the displays of Gladioli.

The Floral Hall is a round building and the center of the hall was occupied by a rockery built by Mr. Scrivener. It was nicely decorated with small Palms, Ferns, Moss, etc. The rocks being full of Mica in quite large pieces and a series of colored lights arranged under the spray from the fountain made an elegant combination which was admired by all the visitors to the hall.

A large display of Gladioli in the outer isle was staged by the East Hartford Gladiolus Co., one section of which was a large "Red Cross" made of Mrs. Francis King with the corners and border of America.

The exhibitors from a distance were handicapped by the very slow express service. The writer, who shipped from a distance of about 100 miles, had the flowers on the road 46 hours and could not expect to compete with growers living near by who could bring the flowers in fresh. The show opening Monday, Labor Day, and the previous day being Sunday it is necessary to ship on Friday to insure the flowers being there on time.

In the regular schedule the following awards were made with plenty of competition in each class:

Largest and best collection—East Hartford Gladiolus Co., 1st; C. W. Brown & Son, 2nd.

Twenty-five spikes America—Coombs, The Florist, 1st.

Twenty-five spikes Mrs. Francis King—East Hartford Gladiolus Co., 1st.

Twenty-five spikes Mrs. Frank Pendleton—A. E. Doty, 1st.

Twenty spikes any Pink except America—East Hartford Gladiolus Co., 1st, showing *Summer Beauty*.

Twenty spikes any Scarlet or Crimson except Mrs. Francis King—F. H. Pond & Co., 1st, showing *Princesse*.

Twenty spikes White—C. W. Brown & Son, 1st, with *Rochester White*.

Five spikes Crimson—C. L. Alling, 1st.

Five spikes Scarlet—C. W. Brown & Son, 1st, with *Liebesfeuer*.

Five spikes Yellow—A. E. Doty, 1st, with *Schwaben*.

Five spikes Lilac—C. W. Brown & Son, 1st, with *Scarsdale*.

Five spikes Mauve—C. W. Brown & Son, 1st, with a new seedling.

Five spikes Blue—East Hartford Gladiolus Co., 1st, with *Baron Hulot*.

Five spikes Dark Pink—East Hartford Gladiolus Co., 1st, with *Independence*.

Five spikes Light Pink—East Hartford Gladiolus Co., 1st, with *Gretchen Zang*.

Five spikes Striped—F. H. Pond & Co., 1st, with *Pres. Taft*.

C. W. Brown & Son showed 20 vases of their new seedlings which attracted considerable attention and which were awarded a Certificate of Merit.

C. W. BROWN.



One of the Austin tables made especially for cleaning Gladiolus bulbs.

pleasant. The collie, ever alert, gazing into the valley below, sniffed suspiciously, as if he thought there might be a share for him in the hidden treasure of the bronze-brown corn shocks, while our mascot, the cat, curled up on a corner of the canvas, blinking sleepily at her half grown kittens as they danced and flirted with the falling leaves. Over head were the birds. Some gathering in restless flocks fluttering and twittering as if anxious to be off on the long trip to their winter home; others huddled together on branches of trees at companionable distances from us called softly in lisp-sibilant tones, as if whispering about us and our curious work, and apparently giving no thought to the morrow. Always interested in the weather, we watched the signs in the sky and sometimes when we had fully decided that a storm was inevitable and had gone to much work to protect the bulbs, the real weather prophet of the neighborhood would appear and remark: "I cal'clate we'll hev right fine weather now, the way the signs is." I think if we were working there now that we would spend a part of our time

## The Glad Philosopher's Musings.

How hard it is to break away from the influence of superstitions, especially those that have followed us from childhood. Although we have got beyond a belief in witches, ghosts and haunted houses, the evolution is all too slow, and some yet remain in fear of the thirteen hoodoo; some still have faith in the revelations of the dream book, the Oija board and the divining rod; and some continue to rely on the groundhog as a weather prognosticator. While we welcome the passing of these whimsical beliefs and fancies let us also remember that there is such a thing as becoming too materialistic. Those periods in the world's history when art and poetry and literature reached their highest development are now known as the superstitious ages. The sublimity of Roman and Grecian mythology insures for it a lasting place in literature, and I hope we will never become so matter-of-fact as to demand the removal of fairies, elves and goblins from the literature of childhood, and of course we must never think of dispensing with dear old Santa Claus.

We smile at the darkies' belief that good luck will result from his carrying around the left hind foot of a rabbit that was killed in a cemetery in the dark of the moon, but is it any more ridiculous than carrying a horse-chestnut in the pocket to ward off rheumatism? Every bride rejoices if her wedding day be rainless, that her future may be a happy one; and every girl who attends the wedding sees to it that a piece of the wedding cake is placed under her pillow to dream over. Of course, neither you nor I believe in any of these silly superstitions, and yet I am going to confess to a certain amount of satisfaction from getting my first glimpse of the new moon over my right shoulder; I like to occasionally find a so-called "four-leaf" clover; and there is a horse-shoe nailed over my barn door!

Scientists have long contended that the moon can have absolutely no influence on plant growth, but notwithstanding, the superstition clings tenaciously, and so there are many people who arrange their seed planting according to the moon's phases or the "signs" as revealed by the patent medicine almanac. I once knew an old lady who always planted her flower seeds when the sign was in the "flower-girl," and she never failed of success in growing flowers. I am inclined to believe, however, that her success would have been fully as great if she had consulted the previous year's almanac by mistake.

There is a logical reason for the success attending the planting of Sweet Peas on Good Friday. It gets them in the ground early, which is of greatest importance. It would be luckier still to plant them on St. Valentine's Day, if the ground could be worked.

When failure follows our misguided effort, or results from ignorance or indifference, how prone we are to charge it to bad luck; but when success is attained, or if fortune smiles, then it is, as a matter of fact, the result of our skill, our wisdom, or our sagacity.

I have no patience with those persons who are so conscientiously truthful that they cannot allow their children to enjoy the Santa Claus myth. I once knew such a man, and heard him declare that he would not permit his child to be so deceived. One day a firm from whom he bought goods made a mistake in the extension of one of their invoices, charging him a thousand dollars too little. A bookkeeper discovered it and called his attention to the error and asked if it should not be paid back. Did the ultra-scrupulous, tender-conscienced paragon of honor and veracity correct the mistake and pay it back? Dear reader, you have already guessed correctly!

### THE GLAD PHILOSOPHER.

#### Potted Plants as War-time Christmas Gifts.

*[Continued from page 121.]*

and other suitable plants that can be more readily grown in the home window garden, which will make a brave showing at Yule-tide and that can also be depended upon to thrive long after the holiday season is over.

One of the easiest plants to grow and prepare for a gift is the *Aspidistra* (sometimes called parlor palm.) To secure new plants, merely divide the root stalk of the parent plant, leaving a generous number of leaves to each division. One sturdy, well-grown *Aspidistra* will yield several very decorative gift plants that if purchased would cost considerable, as florists charge fifteen cents and upwards per leaf in pot.

The justly popular Crab Cactus (*Epiphyllum truncatum*) bears a profusion of bright, waxy flowers at the tips of its spineless, drooping branches. It blooms even more freely when potted and because of its pleasing habit of blooming at Christmastide, this old-time favorite is widely and favorably known as the Christmas Cactus.

"Some rare purpose owns this flower—  
While outside snow flies and drifts—  
That it chooses Yuletide hour  
To display its crimson gifts.  
Though the winds blow, earth numbing  
Wreath the Holly through the rooms,  
For a glad, glad day is coming  
When the Christmas Cactus blooms."  
—[Mary E. Van Zandt.]

The plant is particularly satisfactory as it requires so little attention. It needs only ordinary care to be kept from freezing and it should be watered sparingly. Too much water and poor drainage result in the decay of the roots. To obtain new plants, insert well-grown branches in sandy soil and they will soon root, producing healthy, growing plants. On account of its graceful drooping habit of growth the Christmas Cactus is valuable and well adapted for use in a hanging basket or in a bracket pot.

Another old and desirable holiday pot-plant is the Jerusalem Cherry (*Solanum pseudo-capsicum*). A matured plant cut back and plunged out door in a shady place, in the spring will, if kept well watered, bloom and produce a second crop of bright, green berries, that will redden indoors by Christmas and last nearly all winter. Some of the seed contained in the showy, cherry-like fruit, if sown in the house in February and placed out doors in the spring will be ready for use for the next Christmas decorations.

Few of the winter blooming pot-plants, can surpass in beauty and ease of culture the free-blooming varieties of Primroses. Though they prefer a rather cool, moist atmosphere, they will endure the unfavorable conditions of the living room and give joy for many a winter. Primroses can be readily grown from seeds sown in the spring. The young plants should be kept in a rather shady place until autumn and then repotted for winter blooming. The newer varieties of *Primula obconica* are certainly handsome plants with their attractive foliage and beautiful flowers borne on long, graceful stems. However, it has been said that *Primula obconica* affects some persons somewhat like poison ivy. As far as my limited experience extends, it is harmless, but in handling this particular variety, it might be wise to be careful not to bruise the foliage, especially not the root.

Blooming bulbs in pots or pans have long been extremely popular for decorations at the Christmas season, but there are comparatively few sorts of Dutch bulbs that can be forced into bloom as early as Christmas, and these should be started in September or early in October. But a dainty Christmas box containing a few dormant bulbs of the Sacred Lily, Paper White Narcissus or other choice bulbs, with directions for growing and a Chinese pottery bowl in which to grow them, makes a charming and acceptable Christmas gift, giving the fortunate recipient hours of joy in watching the mystery of the unfolding life within.

The choice of gift plants may be a matter of taste or of convenience. If one is successful in the culture of any particular variety of plants, start good sized cuttings or divisions, so that they may be well-rooted and of generous proportions by the holiday season. Fit a piece of green crepe paper neatly around the pot, stretch the top and bottom edges of the paper through the fingers to "flute" them, tie a red ribbon with bow around the paper covered pot, attach a bright Christmas tag, and the most ordinary variety of plant, if healthy and well-grown, will at once assume a decidedly decorative, festive air and be ready to fulfill the mission of conveying anew the old-time message, "Glory to God in the highest, and on earth, peace, good will toward men."

Owing to war-time conditions many commercial *Gladiolus* growers are not issuing catalogues this year. Some are issuing instead small price lists.



[This department of THE FLOWER GROWER is intended to be one of its most helpful and valuable features. All questions asked in good faith and which are of general interest will have careful attention. The full name and address of the writer must be given, but not for publication.]—EDITOR.

## Defining Annuals and Perennials.

TO THE EDITOR:—

Will you explain to me where the dividing line comes in Dianthus—if the so-called annual varieties are annual, or perennials—they live over two and sometimes three years—where, in exhibitions, annuals and perennials are called for separately? It is uncertain where to draw the line on Dianthus, Snapdragons or Pansies, all come under the uncertain lines—which are they, A or P?

MRS. G. W. BAIN.

*Answer by Prof. Beal:*—All of the species of Dianthus cultivated in North America are perennial. There are, however, two weedy species, *D. prolifera*, Linn., and *D. Armeria*, Linn., naturalized in the eastern states, and two or three others which occur here and there. In discussing the subject of annuals and perennials, we need to keep in mind that some plants may be annuals in the north and perennial in the south. Also that a plant which is perennial may be treated in cultivation as if it were an annual. Among the various species and types of Dianthus we have *D. Chinensis* var. *Heddewigii* which, although it is perennial, is commonly treated as an annual. The Marguerite and Margaret carnations are likewise grown as annuals. All of these give their best flowers the first year in our climate or it does not usually pay to carry them over the winter.

The Snapdragons, under certain conditions, will live over winter, but the plant is culturally an annual in northern gardens. The original species of most, if not all, garden varieties of Snapdragons are perennial in their native habitat.

The Pansies are derived from a perennial species, but from the gardener's standpoint may be considered an annual since he sows seed each year and does not attempt to resurrect old plants in his beds. Some may object that since Pansy seed is sown in summer for flowering the following spring that the plant is treated as if it were a biennial. It all depends upon the point of view. Pansies can be sown early and flowered the same year, in other words, like true annuals.

Varieties or strains of plants which normally are really perennial, but which are called annuals by seedsmen or florists, are those which have been found to give the best results the first season or in their first period of bloom. Recognizing that fact, gardeners treat such plants like annuals and may even speak of them as such.

A. C. BEAL.

## CLASSIFIED ADVERTISING.

*Growers having surplus stock for sale will find this department effective in disposing of it. Five lines (about forty words) \$1.00 per insertion. Additional lines 15c. each.*

SEVERAL years ago I purchased two distinct lots of Gladiolus planting stock which were supposed to be Francis King and America, when this stock commenced to bloom I found them to be Halley and America. I have developed a large stock which I raised under good conditions. I am desirous of selling the entire stock of prime bulbs, planting stock, and bulbets. If interested write JACOB D. SPIEGEL, Norma, New Jersey.

WANTED—Contract to Grow Gladioli next season, any amount from One Hundred to a Million. Lawson Park Bulb Farm, R. 5, Muskegon, Mich.

WANTED—GLADIOLI—Will pay cash for large quantities of Gladioli, all sizes and varieties, immediate delivery.

Address "BUYER,"  
care THE FLOWER GROWER.

LET ME SEND you a Flower Garden of 6 papers of Flower Seeds and my Book on where, when and how to plant, all for 25c.  
W. M. STUART, Marshall, Mich., (Florist.)

GLADIOLI—Planting Stock and Bulbets. Over 40 leading commercial varieties. Clean, healthy, plump stock ready for shipment. Write for prices and special discount. T. H. FULLER, Gladiolus Specialist, 649 Marshall St., Battle Creek, Mich.

SPECIAL OFFER—Francis King and Primulinus Hybrids, 25c. per doz., prepaid; half bushel bulbets of each: Francis King, Primulinus Hybrids and Chicago White. Best offer takes them. Send for my price list. F. M. PALMITER, Janesville, Wis.

WE ARE ORIGINATORS and introducers of General Pershing and Gloxinia, two very choice varieties of Gladioli. We also grow such good varieties as Pendleton, Niagara, Yellow Hammer, Peace, War and Mrs. Fryer.  
W. E. KIRCHHOFF Co., Box 3, Pembroke, N.Y.

GLADIOLUS JUMBO—deep pink, large blooms, a good commercial variety. Planting stock, ½ in. to 1 in., \$2.50 per 100; \$20 per 1000. Bulbets, \$3 per 1000. Send your order early. The Decorah Gladiolus Gardens, Decorah, Iowa.

WE ARE GROWING GLADIOLUS BULBS for the retail dealers. We have room for your order whether one or one million. Ideal soil. Can we grow some for you? Write for terms.  
C. I. Hunt & Son, Hunt, N.Y.

COLD STORAGE—The Editor of THE FLOWER GROWER makes a business of furnishing plans for cold storage plants and also contracts the equipment for same. We handle all kinds, big and little.  
MADISON COOPER Co., Calcium, N.Y.

LARGE ASPARAGUS, RHUBARB, and WITLOOF CHICORY roots for forcing in greenhouse or cellar during winter. Asparagus, 3 year, \$1.50 per 100; \$7.50 per 1000; 4 year, \$2.50 per 100, \$12.00 per 1,000; 8 year, \$1.75 per dozen, \$10.00 per 100. Rhubarb, forcing size, \$1.50 per doz., \$6.50 per 100. Witloof Chicory, \$4.00 per 100, \$30.00 per 1000. Also Parsley, Pansy, Lettuce, Sage plants. Catalogue free.  
HARRY L. SQUIRES, Good Ground, N. Y.

## The Glen Road Iris Gardens

Grace Sturtevant, Prop.  
Wellesley Farms, Massachusetts  
GROWERS AND ORIGINATORS OF FINE VARIETIES OF BEARDED IRIS

## E. E. STEWART

WHOLESALE GROWER OF  
GLADIOLI  
LIST OF 85 VARIETIES  
Brooklyn - - Michigan

## SULPHUR QUEEN

1-2 Inch and under  
\$1.55 for 250

SEND FOR LIST

JOHN B. HUMPHREY  
R. D. No. 3 LOGAN, OHIO

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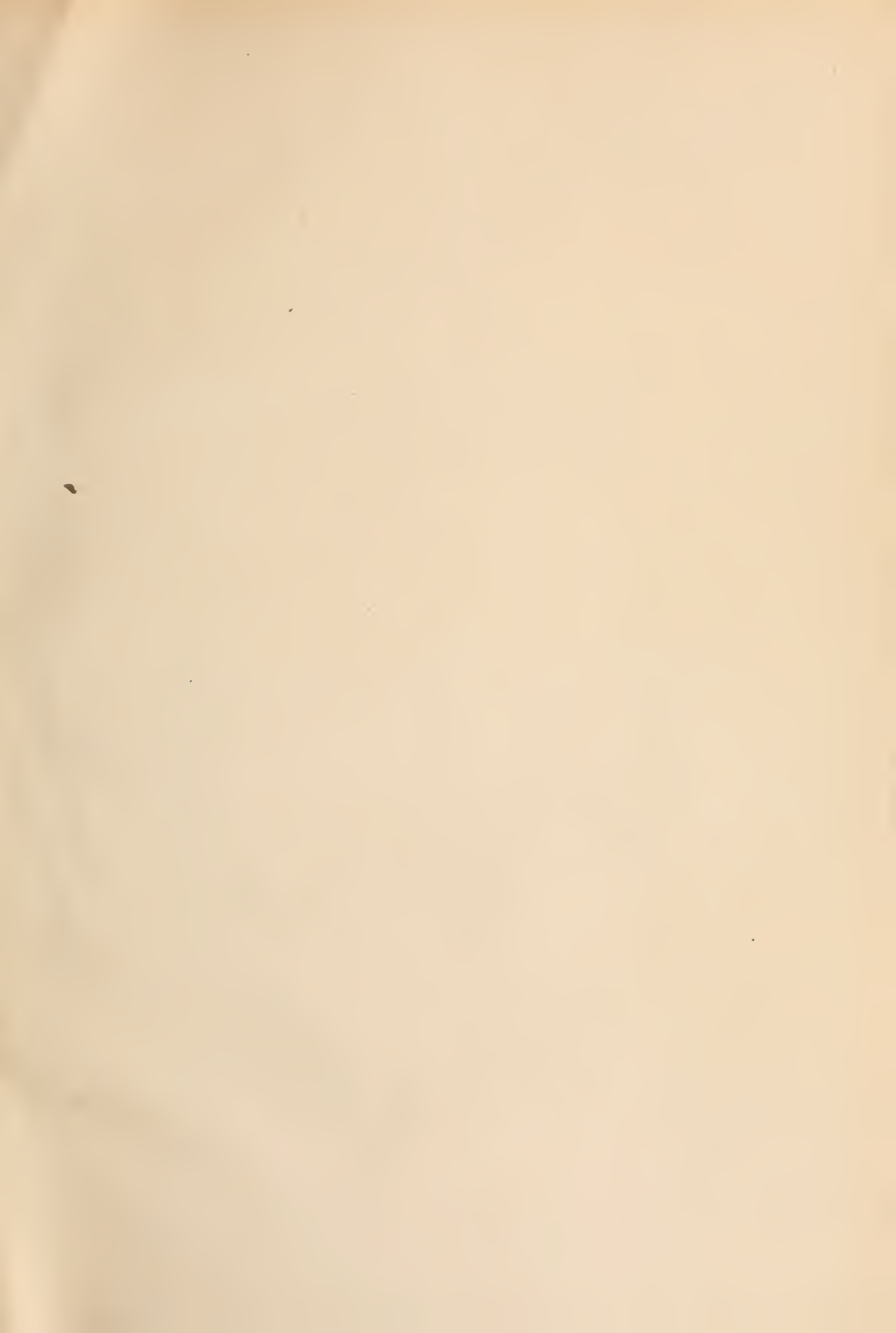
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