The Green Thumb
A Bulletin of
COLORADO FORESTRY AND HORTICULTURE

VOLUME 1
MAY, 1944
NUMBER 3

Mature Bristlecone Pine on Hoosier Pass
Photo by H. L. Standley, from "Colorado Evergreens"
THE GREEN THUMB
A BULLETIN OF COLORADO FORESTRY AND HORTICULTURE

George W. Kelly, Editor
4849 SOUTH SANTA FE DRIVE - LITTLETON, COLO.

The first issue of our bulletin was called simply “The Green Thumb.” This seemed to be the most appropriate name thought of at that time. It has since been suggested that we add the descriptive phrase, “A Bulletin of Colorado Forestry and Horticulture.” How do you like this combination?

The last issue of our little paper was given over entirely to information helpful for Victory Gardens, and this issue also contains some additional articles related to vegetables. It was not the original intention of the organization to cover more than ornamental horticulture, but we believe that helping along the Victory Gardens is very timely, and we are glad to be able to do so. In publishing information relative to Victory Gardens, our object will be, as in regards to general horticulture, to supply information particularly applicable to our peculiar Colorado climate. General vegetable gardening information we have in plenty, but as usual much of it does not take into consideration Colorado conditions. Some articles of general interest originally planned for this issue will follow in an early number.

OBJECTIVES OF THE GREEN THUMB

The first and foremost object of “The Green Thumb” is to supply horticultural information applicable to the Rocky Mountain region. Horticultural literature we have in plenty in these United States, but
if any eastern writer gets as far west as the Mississippi River, he makes a flying leap to the Pacific Coast, and leaves the Rocky Mountain area truly the forgotten country horticulturally. Let us see then why there is such a need for horticultural information written for Rocky Mountain conditions. Must what are the peculiar climatic conditions which make this a very different country horticulturally? Perhaps 50 per cent of the plants and practices advocated in the average horticultural book or magazine are not suitable here.

Let us get clearly in mind what these peculiar climatic differences are so that we shall know why we must revise most horticultural writings to fit our Rocky Mountain conditions. Most of the Rocky Mountain area where people live and practice horticulture is near the foot of the mountains where the climate is very much like that of a desert. The rainfall is light, and cloudy moist days are rare. In any region of light rainfall the soil is inclined to be alkaline. Our altitude gives us a short growing season. Our nearness to the mountains probably influences the weather so that we have very irregular Springs and Falls. In Canada, where the weather is either winter or summer, they can raise plants that are impossible here, because of the frequent and unpredictable spells of cold or warm weather through many months of the year. Our air here is often dry and cold, and we have many weeks of bright sun in the winter time when plants are dormant and unable to combat this drying out. Denver is in temperate zone III, which means that there is only one zone in the whole United States where the average minimum temperature is lower than it is here. This combination of little rain, alkaline soil, high altitude, irregular weather, cold spells, dry air and hot sun in winter are our particular combination of horticultural peculiarities and problems, and are the things which will be discussed and explained in this magazine.

We plan a series of editorials to further explain these differences and problems of our region, probably entitled: "Why Rake?" "Why Trim?" "Why Cultivate?" "Why Fertilize?" "Why Water?" "What Do We Mean By Hardy?"

JOIN THE COLORADO FORESTRY AND HORTICULTURE ASSOCIATION NOW

The first two issues of our bulletin were sent to a large list of names of those who might be interested in the objects of our organization. It must be plain to all that we cannot continue to send out large numbers of these valuable bulletins with the income from a few members at $1.00. The best way to make this self-supporting is to enlist a large number of members at the $1.00 rate and more sustaining members at $5.00. We hope to make the information in these bulletins worth much more than the small membership fee. If you think that the objects of this organization and bulletin are worth while send in your membership and tell your friends about it.

It should be understood that this new organization is not intended to take the place of any existing organization. It is not intended that it will concern itself with business or other problems peculiar to various existing groups. It is not intended that all articles in the bulletin will be of interest to all members. The one thing that brings us together in this organization, from many groups of varied interests, is our common love for growing plants. This is well expressed in the name of the bulletin, "The Green Thumb."

But further than our general interest in growing things, is our interest in the horticultural peculiarities of our own Rocky Mountain country. To collect and disseminate horticultural information correct for this area is our common purpose. We must keep this purpose always in mind so that we can hold together all the members of varied angles of interest.

Let us not expect that everyone will be interested in our purposes, but let us try to find all those who love plants for any reason and invite them to join us. And, for the sake of the good that we can do by being united, let us be prepared to be tolerant of others who do not see things quite as we do. If we all have "A Green Thumb" we will work together and make of this an organization to be proud of.

Let our aim be to keep all information put out by the organization just as nearly correct as possible and we will be able to fill a long-felt need, do much good and gain a worthy reputation.

WHY RAKE?

As I was driving by a big institution a few days ago I noticed several old men out raking the lawn and under the trees and shrubs. They were piling up and hauling off truck loads of dead leaves and grass. Spring was in the air, so of course one must rake.

With the shortage of labor and so many other important gardening operations needing to be done it seemed a shame to have these men doing this raking which was not only unnecessary but was actually a detriment to the grounds. Of course raking makes a place look neat, but if in raking most of the humus so badly needed in this country is removed, it is not always a good practice.

We should know what we are doing when we rake, and consider whether the neatness acquired is worth the removal of valuable mulch and humus. To rake off all the dead leaves and litter from beneath trees and shrubs is doing them no good. Dead leaves on the ground are a natural thing and really do not look badly. They act as a mulch to retain moisture in the soil, help keep a good soil temperature and eventually produce valuable humus.

Of course raking makes a place look neat, but if in raking most of the humus so badly needed in this country is removed, it is not always a good practice.

We should know what we are doing when we rake, and consider whether the neatness acquired is worth the removal of valuable mulch and humus. To rake off all the dead leaves and litter from beneath trees and shrubs is doing them no good. Dead leaves on the ground are a natural thing and really do not look badly. They act as a mulch to retain moisture in the soil, help keep a good soil temperature and eventually produce valuable humus.

But let us try to find all those who love plants for any reason and invite them to join us. And, for the sake of the good that we can do by being united, let us be prepared to be tolerant of others who do not see things quite as we do. If we all have "A Green Thumb" we will work together and make of this an organization to be proud of.

Let our aim be to keep all information put out by the organization just as nearly correct as possible and we will be able to fill a long-felt need, do much good and gain a worthy reputation.

WHY RAKE?

I have watched gardeners rake and then wash with the hose all the loose humus from the surface of their lawns, and then at once spread fertilizer back on. Sometimes the manure itself is raked off a short time after it is put on! This seems very foolish when we stop to reason it out. Most lawns are benefited by leaving on most of the grass clippings. It makes a covering which catches rain, reduces evaporation, covers the soil to prevent weed seeds getting started and gradually decomposes to produce valuable fertilizer. This passion for neatness also induces people to rake off much good material from their gardens which should be worked into the soil during cultivation. Of course leaves and litter from diseased plants should be burned, but otherwise any excess plant tops should be piled on a compost pile to decay. Humus is the material that most of our Rocky Mountain soils need most badly. It will loosen a heavy soil, and enable a sandy soil to hold more moisture. In decaying, it also releases valuable chemicals for the use of plant growth.

When you get the urge to rake, stop and think, "Am I doing real good or harm?"—George W. Kelly.
Watering Your Victory Garden

By WM. H. LUCKING, Jr.

Practical Advice By a Man Who Knows

There are two fundamental ways of watering a vegetable garden: one is by taking a hose and sprinkling, the other by making a furrow and irrigating. Either method has its advantages.

Most of us know how to sprinkle a lawn, but watering a vegetable garden with a hose is somewhat different. When watering a vegetable garden you will have to know when and how to do it. One of the first things is the watering at the time of planting. After planting your seed you will have to give the ground a watering by taking the hose and using a fine spray, wetting the soil down well. Then watch your soil so that it does not form a crust on top. If a crust does form, give it a light sprinkling each day until your plants come up. Do not sprinkle your garden too much when the weather is cool. Vegetables take a great deal of water when the weather gets warm. It is best to do the sprinkling of your garden in the early morning or late evening. Be sure to give it a good soaking, then leave it alone until the soil has dried out. Do not water again unless the soil is dry enough, after each sprinkling, loosen the soil so as to form a mulch. By cultivating often you conserve the moisture and make a better growing condition.

When watering by furrow irrigation the one important thing is to have your garden plot smooth with just enough slope for the water to run slowly. By furrow irrigation we mean making a small ditch or furrow along the side of the vegetable row, and letting the water soak in as it runs along; using the same method as in sprinkling, or soaking the soil well, and then cultivating after each irrigation.

It is a good plan to divide your garden in two parts, one for sprinkling and the other for furrow irrigation. Vegetables such as corn, tomatoes, cucumbers, squash, carrots, head lettuce, parsnips, peas, and beans all do much better with furrow irrigation. Vegetables like spinach, leaf lettuce, radishes, Swiss chard, turnips, beets, cabbage and cauliflower all do well with sprinkling.

If the season is very hot and dry it will do no harm to sprinkle once a week. Again and again we get information from the East, or even from England; some of it is absolutely misleading and wrong.

Misinformation from these sources is especially common in the four fields: 1. Planting dates. 2. Soil requirements. 3. Varieties of vegetables. 4. Plant pests.

1. When to plant is often determined by Zone maps, showing latest killing frost in spring and earliest killing frost in fall. Interestingly enough these Zone maps often stop at the eastern boundary line of Colorado, New Mexico and Wyoming. No information is available for the Rocky Mountain region, and not until we come to California do we again find dependable data. The only way out is to get a local list of seasonal data from the Colorado yearbook. For instance, the latest killing frost ever recorded for Denver was June 6 and the earliest fall frost September 12. That leaves only 98 growing days for tender plants. This of course does not hold for such hardy plants as spinach, peas, turnips, cabbage and many others.

Victory Gardening In Colorado Is Different

By M. WALTER PEŞMAN

"You should lime your garden every third year." "The making of an asparagus bed is a difficult and complicated job." "Anthracnose is one of the most serious diseases of beans." "Ponderosa and Oxheart are among the best varieties of tomatoes."

Don't believe these statements even if you do find them in reputable (Eastern) textbooks. They are illustrations of the need of Colorado information for the growing of Colorado plants. The fact is: that asparagus is so easily grown here it is becoming a roadside weed around Grand Junction — that most of our soils have no need of added lime at any time — and that Marglobe and Stokesdale are a lot better adapted to Colorado than most other tomatoes.

Specific facts for Colorado Victory Gardens are highly essential and not easily obtained. Again and again we get information from the East, or even from England; some of it is absolutely misleading and wrong.

2. Soils information about Colorado is often missing. Just because "sour soils" are not uncommon in New England, well-meaning people are apt to ascribe all soil troubles to "acidity" and then follow up the wrong diagnosis by the wrong prescription, namely, lime. The fact is that sour soils are very, very rare in our gardens; on the other hand, too much alkalinity is not at all uncommon. The remedy? Grow plants that can stand alkaline soils and provide proper drainage with proper irrigation. As luck will have it, a great many vegetables can stand quite a bit of alkalinity. In general, our soils have enough of the other elements that may need to be added are phosphorus and, rarely, potash. Nitrogen is plentiful in all fertilizers and manures. Adding Vitamin B1 has not shown spectacular effects here as it has in California.

3. For the best varieties of vegetables consult, not Eastern, but local catalogs and the list of Colorado varieties issued by the Colorado State College. These lists have been carefully tested. Naturally there is some difference between different regions, such as the San Luis Valley, the Arkansas Valley, the Greeley region and the low,
mild-weather region around Grand Junction. But all in all, you can't go very far wrong by following local catalogs. One thing should be mentioned: often home varieties are different from commercial varieties, and dry-land from irrigated culture. (See bulletin: "Adapted Vegetable Varieties for Colorado," A. M. Binkley.)

4. Plant Pests, both insects and plant diseases, are not at all the same here as they are in Massachusetts, Virginia, or California. This stands to reason since our dry climate discourages certain insects (and especially a number of fungous diseases), but also attracts others. Nematodes or eelworms, for instance, are quite serious in the South, but are hardly known here. Potato psyllids, on the other hand, the common cause of potato failure in Denver, are not even mentioned in many books on harmful insects. Potato beetles are less choosy; they are all over the U.S.A.

To guard against misinformation, state bulletins should be consulted. The Colorado State College issues special lists of diseases and insects (see for instance, "Save Your Vegetable Garden," by Sam C. McCan bell, and "Diseases of Victory Gardens," by W. J. Henderson).

Luckily the general run of remedies holds for both native and introduced troubles; little difference of application is found between the East and the West and the Rocky Mountain region.

The Colorado Forestry and Horticulture Association intends to point out specific information for this region in its publications to come. That will make it possible to combat Colorado insects and diseases with Colorado methods.

WHY VICTORY GARDENS?

We Need 30 Per Cent More This Year

Food has always played a very important part in war, and it is especially important now.

Last year 40 per cent of the vegetables raised in this country were from Victory Gardens. This whole-hearted response to the appeal for Victory Gardens helped to keep down the price of vegetables; relieved hunger; and would have had the same quantity of food produced commercially; made it possible for many to have vegetables that would not have had them otherwise; gave many their first enjoyment of really fresh vegetables; and did much to improve the health of the garden workers both physically and mentally.

This extra 40 per cent of vegetables raised in Victory Gardens just about balanced the increased demand from our own war workers, soldiers and lend-lease; and

many found that they did not have the proper equipment to successfully raise a garden. Their soil was not good, or there was too much shade, or not enough available water, or business did not leave sufficient time, or other reasons. Of course where conditions are not suitable it is really a waste of seed, fertilizer, water, and time to attempt to raise vegetables.

Last year the weather was favorable for a bumper crop. This year may not have as favorable conditions as last year, but all in all, you can't go very far wrong by following local catalogs. One thing should be mentioned: often home varieties are different from commercial varieties, and dry-land from irrigated culture. (See bulletin: "Adapted Vegetable Varieties for Colorado," A. M. Binkley.)

4. Plant Pests, both insects and plant diseases, are not at all the same here as they are in Massachusetts, Virginia, or California. This stands to reason since our dry climate discourages certain insects (and especially a number of fungous diseases), but also attracts others. Nematodes or eelworms, for instance, are quite serious in the South, but are hardly known here. Potato psyllids, on the other hand, the common cause of potato failure in Denver, are not even mentioned in many books on harmful insects. Potato beetles are less choosy; they are all over the U.S.A.

To guard against misinformation, state bulletins should be consulted. The Colorado State College issues special lists of diseases and insects (see for instance, "Save Your Vegetable Garden," by Sam C. McCan bell, and "Diseases of Victory Gardens," by W. J. Henderson).

Luckily the general run of remedies holds for both native and introduced troubles; little difference of application is found between the East and the West and the Rocky Mountain region.

The Colorado Forestry and Horticulture Association intends to point out specific information for this region in its publications to come. That will make it possible to combat Colorado insects and diseases with Colorado methods.

FLOWERING CRABS FOR COLORADO

Many of the spectacular flowering trees of the East and South are not hardy in Colorado. This makes it desirable that we search for more good varieties and species of those genera known to have kinds suitable for this climate. The flowering crab apples seem to offer one of the best fields for experimentation. So far no other flowering trees have been tried here which have given such general satisfaction. As is true so often, many of the crabs of the east are not satisfactory here, and some considered of mediocre value in this area prove to be our best kinds.

To put into effect the policies of the Colorado Forestry and Horticulture Association we will attempt to collect the experience of Colorado horticulturists and make it available to the membership through our bulletin. We thought it appropriate to start with a survey of experiences with flowering crab varieties.

Of 75 horticulturists over the state questioned, about half have replied. These total almost 500 years' experience, or an average of about 15 years each. Where a majority have found certain kinds good, or where others have been generally discarded, this is rather safe information to be governed by. Some kinds have been tried by only a few or for only a few years. Regarding these, we can only say that they are worth further trial. We shall not attempt here to repeat details about crab apples in general which may be obtained from such publications as "Crab Apples for America," by Donald Wyman, and Bailey's Cyclopedia of Horticulture. We will only call attention to those characteristics which make them suitable or unsuitable for growing in Colorado.

The Hopa is next in favor, and rightly so. Twenty-two voted for it, with no objectors. It is of neat upright habit of growth, practically immune to blight, and the beautiful white flowers are very attractive. The Hopa is a result of a cross between the Redvein and the Siberian Crabs. Most of the hybrid crabs having the Redvein as one parent seem to be very happy in this climate. Rose-red bloom, red flesh of the fruit and red coloring in the stems usually indicate a very attractive tree. About the only objection that could be found to the Hopa is that there is not much contrast between the dark pink flowers and the dark green leaves, but much of the time the tree comes into full bloom before the leaves unfold, so this is not always a fault. The tree grows rapidly which might be an advantage or disadvantage, depending on its use. The fruit is small, dark red, rather ornamental, but of little use as food.

The Dolga rated very close to...
the Hopa, with 16 voting for and none against. The Dolga's popularity is the result of several good qualities rather than only one spectacular showing as with the first two kinds. This tree as the Hopa is the result of some of Prof. Hansen's experiments. The flowers, being white when open with only a little showing of pink in bud, are not as striking as those of darker coloring. The fruit is very desirable, both from a beauty and utility standpoint. The apples are almost the size of golf balls, and when ripe are a brilliant red, giving the effect of a Christmas tree loaded with bright ornaments. The fruit will remain in good condition for a long time, but when its value for jelly and jam is appreciated it is usually picked and used. The red coloring to the skin and flesh makes fine colored jelly, and the flavor is excellent. The Dolga is a little less symmetrical in growth than the two preceding kinds, but has a branching habit which makes it one of our best trees for espalier use. It is a sturdy grower and very resistant to blight.

Next in favor comes the Eley Crab, with 5 votes for and none against. It is another of the Redvein hybrids, and has many good qualities. It seems to be as hardy, fast growing and immune to blight as the Hopa. The habit of growth is much more spreading and loose. The flowers are a darker rose-red than the Hopa and more showy. It deserves to be used more.

Red Siberian is still another of the Redvein hybrids, and is due for much wider use when it is better known. It received 3 votes. The habit of growth is medium spreading and rather dense. The flowers are similar to Hopa or Eley, but a little different shade. The outstanding attraction of this tree is its leaves. As the name indicates, they have a reddish green appearance with silvery white hairs on the under side.

The Redvein Crab (Malus pumila niedzwetzkiana) is still grown by some, the almost an equal number find its faults objectionable. It bears the typical rose-red flowers and the fruit is large and good to cook. The growth habit is rather spreading. The general opinion of those who have grown it and some of its hybrids is that the children are an improvement over the parent. It seems to be of irregular growth and more subject to blight and sunburn.

The Prairie Crab (Malus ioensis) certainly has a place and might well be more generally used. The fact that it is of more informal habit of growth and that the flowers drop their petals when faded make it very useful in many situations. The color of the bloom is the same as its popular sport, the Bechtels, and the fragrance is something to remember. It is somewhat subject to mildew.

A number of little known crabs are being tried out by a few people. Some of them will very likely prove of merit when enough years have gone by and enough have been tried in varied situations. Some of these are Malus arnoldiana, M. purpurea, M. transitoria, M. Zumi calocarpa, and M. sargentii.

Several kinds have been tried and found wanting. The Floribunda is generally unsatisfactory on account of susceptibility to blight and sunburn. The Siberian Crab (M. baccata) grows vigorously and has some value both for flower and fruit, but is subject to blight which in many cases ruins a good tree. The eastern wild crab (M. coronaria) is a charming tree in the Eastern Woods, but has not grown so well here. M. Schiedeckeri and M. Halliana Parkmanni are reported to be grand trees in the East, but have been generally a failure here.

Of the Crabs used sometimes for their landscape value, but chiefly for their fruit, the Florence seems to be the favorite. It is reported to be an early bearer of good quality fruit and practically immune to blight. Some definitely not recommended in this class are Whitney and Hyslop.

HELPS FOR VICTORY GARDENERS


"Grow What You Eat." Plans and suggestions for your Victory Garden, presented in a four-act playlet published by the makers of Planet, Jr., Garden Tools. Free at your dealers, or send a postcard to S. L. Allen & Co., Inc., 3414 North 5th St., Philadelphia 40, Pa.

Send to the Extension Service, Colorado State College, Fort Collins, for any of the following:

- Vegetable Varieties for Colorado.
- Vegetables for Victory (planting dates, etc.).
- Starting Vegetable Plants.
- Irrigating the Victory Garden.
- Pest Control on the Home Front.
- Diseases of Victory Gardens.
- Growing Tomatoes in Colorado.
- Strawberry Production in Colorado.
- Dwarf Fruits.
- Orchard Management in Colorado.
- Grape Growing.

Note: Colorado gardeners can get more from their efforts. Write for any help not listed here.

BRISTLECONE PINE

The Bristlecone Pine, or Foxtail Pine (Pinus aristata), is a native of Colorado, found at the higher altitudes. Its needles are usually dotted with globules of pitch. As no other native evergreen has this characteristic, the tree is very easy to recognize when such exudations are found on the needles. The needles occur in bundles of five, are very dark green, thick and short, and hug the branches, with the result that the ends of the branches resemble foxes' tails. The Bristlecone Pine becomes very picturesque at maturity, as is shown by the illustration.

Although this tree is available at local nurseries, it has been much neglected in Colorado landscaping use. It is naturally slow-growing, and in addition, the "candles" that are formed by the buds in the spring are cut in half just prior to the time that the new needles break forth, the tree can be kept "in scale" about the small house for many years. Often it has a number of stems and is bushlike in form, and it adapts itself to hedging use. Although it is sometimes somewhat difficult to transplant, once established it seems to have few enemies, and if given plenty of sun and a well-drained, open soil, will take care of itself under the most adverse climatic conditions.

(Continued from Page 8)
**D. M. ANDREWS**

**PIONEER ROCKY MOUNTAIN HORTICULTURIST**

(Editor's Note: In these pages we should like occasionally to call your attention to some of the early pioneers in Rocky Mountain horticulture. It is very appropriate to start the series with Mr. Andrews, who was probably more active than anyone else in introducing plants of the Rocky Mountains to the world.)

Darwin M. Andrews was a good example of the old statement that "A prophet is not without honor save in his own country." He was known and appreciated by botanists all over the world, yet so quiet and unassuming was he that few who lived near him knew of his achievements in horticulture.

D. M. Andrews was born October 3, 1869, in Farina, Ill., and died in Boulder, Colo., August 14, 1938. These dates are unimportant, but the years in between were not. They were full of worthwhile activity and noteworthy achievements.

The boy's first education came from his mother who was a college graduate. His interest in horticulture also came from his mother, who taught him about plants and Nature along with his school subjects. As a young man he attended Milton College in Milton, Wisconsin. He paid most of his way by collecting plants. In 1893 he came to Boulder, Colo., and that fall married Mary Wheeler, who continued the fine influence of his mother. Mrs. Andrews was his companion on many of his plant hunting expeditions and was always as much interested in the work as was Mr. Andrews himself.

The Andrews Nursery in Boulder grew from a small plot with a few kinds of flowers for sale to the large Rockmont Nursery in its present location, which was known all over the world. He was never a nurseryman from the commercial angle, however. He was in the business because he loved the plants and wanted to make them available to others. He repeatedly turned down opportunities to expand his nursery and cash in on some of his discoveries, by saying, "The business is big enough now. The added responsibilities of a larger business would not leave me time to do the work with plants that I want to do."

The botanist, Herbert Durand, visited Mr. Andrews in 1929 and said of him, "Mr. Andrews has done more in his quiet way for horticulture than Luther Burbank ever dreamed of doing. On a trip abroad last year everyone I met in horticultural circles asked me if I knew Darwin Andrews, and that was the first question I was asked when I went into the Royal Botanical Gardens of Edinburgh."

He introduced a number of peonies, lilacs, iris and phlox, but his chief interest was in domesticating native Colorado plants and shrubs for use in the home garden. He believed that the native plants were more beautiful than many imported from foreign countries, and he did some remarkable work in that line. At the time of his death he had retired from active work in the nursery and was devoting his whole time to the breeding of phlox.

He was considered an authority on rock garden plants. In the "Better Homes and Gardens" of March, 1935, it was said, "Years hence Darwin Andrews will be eulogized as one of America's greatest plant breeders."

He took many prizes for his plants, the outstanding one being the highest rating in the American Iris Society's Symposium, for his seedling iris, Candelight. He was honored a few years before his death by the University of Colorado, which awarded him the honorary degree of Master of Science.

Shortly after his death a distinguished horticulturist wrote, "We who knew Mr. Andrews personally have lost more than the world in general; the man was as fine as the scientist. Why is greatness so often associated with humility, with simplicity, and with friendliness? A visit with him was initiated by the feeling that he was truly glad to see you, interested in any phase of horticulture or botany, and ready for a straightforward discussion of almost any worthwhile subject. He must have known the word sham, and he may have encountered it, but it could not persist in his presence. Mr. Andrews will be remembered as a plant breeder of very high rank, all the more noteworthy because devoid of all grandstand play and press agent notoriety. Few people can have oaks, cottonwoods and other native plants named after them; Andrews' Poplar is finding an important place in the plantings of the Rocky Mountain region. Other natives have been introduced to the general public by Mr. Andrews. Whoever heard of Forestiera as a hedge plant, of the numerous types of native cacti and heuchera, pentstemons and yuccas until he made us see their outstanding merits? Scores of Rocky Mountain trees and shrubs, little known even ten years ago, are now beginning to be used in gardens. He used to travel thousands of miles in plant hunting."

The valuable notes so carefully collected and preserved by Mr. Andrews during his lifetime of horticultural work have been assembled by his family and friends, and we are still hopeful that it will be sometime possible to publish them, so that all may benefit by his long experience.
CRASSINA GRANDIFLORA

If you want a plant that will bloom literally all summer in a rock garden or in any hot, sunny, very-well-drained spot, the little Crassina grandiflora will do just that. Common name? Here's a job for the infant Horticultural Society. Christen it. "Pouring Gold" might fit.

A mature plant of this is from one to one and a half feet in diameter, spreads out happily with adequate foliage and no awkward bare knees.

From June till after frost if it is happy it bears quantities of golden yellow single daisy-like flowers consisting of broad bracts. This bract business being the secret of long season bloom, for each flower sits there looking perky for an indefinite period. These disc flowers which form the center are usually a deep burnt orange color. The habit of this plant, Nelson's description is graphic: "Closely appressed — imbricated bracts, dry and firm, broad with rounded summit — the chaffy bracts conduplicate around the disc flowers."

These disc flowers which form the center are usually a deep burnt orange color. The habit of this plant, Nelson's description is graphic: "Closely appressed — imbricated bracts, dry and firm, broad with rounded summit — the chaffy bracts conduplicate around the disc flowers."

FOREST NOTES

A "Forest of Thankfulness" will be planted in England near the Kent coast to commemorate the heroes of Dunkirk—every one of them. Hardwood trees, "the kinds used to build big and little ships," will be used. England is planning for this while the war is on.

Ten years ago the City of Springfield, Illinois, started its ambitious plan of planting a million trees and shrubs around Lake Springfield and on 4,000 acres of marginal land. As many as a hundred men have been employed at one time. Reclamation is not the only work for the woods, as the wood is closely connected with recreation.

Before the war a city in Germany had a similar program, including a city Forest, conducted on proper forestry lines. Can Colorado towns get an inspiration from these examples? In the post-war planning it might be well to give a thought to City or Regional tree planting. Done on the basis of a carefully studied survey, in places where trees can readily be grown—following a plan drawn up by people who really know—we may have an opportunity of showing the world what returning soldiers and of furnishing recreation for all the coming generations. - Kathleen Marriage, Colorado Springs.

MAY GARDEN CALENDAR

FIRST HALF—

Finish planting new trees and shrubs or transplanting old ones before they come far out in leaf. Perennials can be moved with a ball of soil almost all summer.

Set out early cabbage, cauliflower and celery plants.

New lawns can be planted all this month. It pays to prepare the soil well. Reseed bare spots in old lawns. Do not water lawns too much now or they will develop shallow roots and suffer during the hot weather next fall.

If you did not give your juniper, dogwood, snowball and euonymus a dormant spray look now for aphids. They do a great deal of damage very early on these plants.

Sow seeds outdoors of marigold, cosmos, bachelor buttons, larkspur and calendula.

Start cultivating and weeding as soon as the weeds show up. A little work now saves a lot of work later and prevents your valuable plants being crowded and damaged.

Thin the little seedlings before they crowd each other too much.

How about starting a small herb garden this year? It is fun and profitable.

SECOND HALF—

Plant beans, corn, melons and squash.

Set out plants of tomatoes, eggplant, peppers, and late cabbage.

Clean out the pool and plant the water lilies. They like a very rich mixture of soil and manure.

Set out seeds of tender annual flowers such as zinnias, asters, petunias, snapdragon and stocks.

Finish cleaning up rose and perennial beds. There should not be any more snow this spring.

Keep a close watch for damaging insects on all vegetables and ornamental plants. Learn to distinguish between the sucking insects which require a contact spray and the chewing insects that require a stomach poison. Here is where truly "a stitch in time saves nine."

Do what trimming and thinning is necessary on shrubs AFTER they bloom. This will minimize damage to next year's bloom.

Start shaping up the hedges, especially if they were not given a good hair cut late last fall.

Edge up the lawn and borders. Neatness is about one-third of the beauty of a garden.

Do not cut the tops of tulips off until they are entirely dried up. Tulip seed pods should be snapped off to prevent their taking too much strength from the new bulbs being formed.

Make a note now of tulips, hyacinths, crocus, narcissus and other fall bulbs needed.

SAMUEL D. WALDREN

April 25th, 1944, marked the closing of the long career of one of Denver's Pioneer Horticulturists. Samuel D. Waldren worked with trees in Denver for about half a century. He trimmed and repaired trees years before the term "Tree Surgeon" was invented. He planted trees in many of Denver's parks and in every section of the city. Denver Horticulture has been much influenced by his work, and the hundreds of trees that he planted and cared for remain as living monuments to him.
CONServation of Scenic Beauty

Is one of the objectives of the Colorado Forestry and Horticulture Association

The Great Outdoors

Yours to Enjoy
Not to Destroy

Preserve the Forest
Keep it clean and attractive

One tree will make a million matches
One match can destroy a million trees
One slovenly camp site spoils the whole trail
Make friends instead of victims of the wild creatures

You want your children to enjoy these beautiful places after you are gone