

The BEGONIAN

Devoted to the Sheltered Gardens

	Page
SEEKING INFORMATION FOR DISSEMINATION	50
By The Editor	
GLOXINIA EXPERIENCES	51, 60
By Mary Duncomb	
A WESTERNER'S APPRAISAL OF MRS. BUXTON'S "BEGONIAS AND HOW TO GROW THEM"	52
By Mrs. Annie C. Robinson	
VENTURA GARDEN MAKERS CHALLENGED	53
By Irene Nance	
FUCHSIA GETS HER SHAPE IN MARCH	54
By Oliver Kehrlein	
THE HOME GREENHOUSE—Part I, with Sketch by L. A. Gas Co.	55, 56, 57
By Dr. W. C. Drummond	
BEGONIA ERYTHROPHYLLA—With Sketch	58, 59, 63
By Alice M. Clark	
MRS. BUXTON'S BOOK	60
By Librarian Eleanor Crowder	
PROGRAM SUGGESTIONS FOR BRANCHES	60
By Verna Pateman	
BEGONIAS IN FLORIDA	61
By Mulford B. Foster	
TWENTY ROBINS FLYING	61
By Frances Downing	
OFFICERS RIVERSIDE BRANCH	62
SAN FRANCISCO BRANCH RECEIVES IMPETUS	62
QUESTIONS & ANSWERS	61, 62, 67
By Mrs. Russel T. Bailey	
TO THE SEED FUND FANS	63
By Mrs. E. Carrell	
OFFICERS GLENDALE BRANCH	64
DEMONSTRATION FLORAL ART BY S. C. HORTICULTURAL INST.	64
SUCCESS WITH BEGONIAS AS WINTER HOUSE PLANTS	65
By Elizabeth H. Skinner, Dec.	
MINUTES—THE A. B. S. BOARD MEETING	67
CALENDAR	68

The BEGONIAN

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SEEKING INFORMATION FOR DISSEMINATION

By YOUR EDITOR

● Since March 7-14, 1946, is the *Twelfth California Conservation Week* sponsored by the California Conservation Council with headquarters in Santa Barbara, Calif., and Co-operating Agencies, we are inspired to ask what are the other States doing with regard to such subjects as Conservation, Bird and Arbor Day and other allied subjects?

A blanket word such as *Conservation* covers many fields of action: fire prevention to avoid depletion of natural resources and wildlife, preserving recreation and scenic areas, saving the soil, prevention of food and fibre, conserving water, and others. We all need to get together on these things so that our COUNTRY OF COUNTRIES may be made and kept the finest in every possible way NOW and for Our Children's Children.

Please send information to the Editor of THE BEGONIAN which may be published at proper time as reminder to every man, woman and child who reads our magazine.

And I will make thee beds of roses,
And a thousand fragrant posies.

—Marlow. *The Passionate Shepherd to his Love.*

PLEASE READ AND UNDERSTAND

We have been trying to get THE BEGONIAN out on time, but it seems that we have to ask the indulgence of our readers for awhile yet. Much time is consumed between Publisher and Mailer and Post. Just know that your BEGONIAN is on the way and write to Mrs. Mary Ellen Clark only after the month is over if THE BEGONIAN is not received to avoid a tremendous lot of unnecessary checking in an already congested office.

Gloxinia Experiences in the Mid-west

By MARY DUNCOMB, Luverne, Minn.

• It seems to me a great deal of interest has been awakened in Gloxinias lately in these parts of the country. It was not so long ago that these interesting and beautiful plants were regarded somewhat as problem children, only the few seemed to hold the secret of successful growing of Gloxinias. The tubers were hard to get; one hesitated to ask friends for leaves to try to root, and who was daring enough to risk buying expensive seed only to fail to mature tubers? But all this has changed now owing to the untiring and unselfish efforts of a few who not only have succeeded in the various ways of growing Gloxinias, but who have also generously shared their knowledge with others.

Among these may I mention Mrs. A. W. Knock of Crooks, S. D., who introduced us to her method of growing them out of doors in summer—something we had been told was an impossibility. This has given many of us an opportunity of enjoying them if we lacked window room for them in winter. During their dormant period in winter it is an easy matter to store them out of the way of other plants we may want to grow. Mrs. Harry Crisp of Dell Rapids, S. D., has been very successful in growing quantities of nice "Glox" tubers from seed purchased from reliable seedsmen and thus has been able to supply other "Glox"-lovers in the Mid-West with tubers at the most convenient times for their shipment. It is not always easy for us in this section to obtain them just when we would like them on account of shipping conditions affected by weather. This has really been a great service to those of us living inland.

My neighbor, a young farm woman, has to my mind given each one of us, no matter in what part of the country we may live in, one of the greatest services of all. She has succeeded in hand-pollinating the many blooms on her famous old Gloxinias, and so has been able to furnish many with the seed thus ripened. It must be admitted that perfectly fresh Gloxinia seed sown as soon as possible after ripening, gives quick results and strong plants, at that time germination is almost perfect, and the resulting plants are strong; making good tubers if given the proper care. This I have found out by my own experience after planting seed which matured on my own plants. This young woman, Mrs. Arthur Ahrendt, Luverne, Minn., has been

fortunate to belong to a family who have always been able to grow outstandingly good Gloxinias when others failed. It is, from these "Glox," which bloom more profusely than any I have ever seen in a private home collection, that she has been able to harvest so much good seed.

To begin with, the mother of Mrs. Ahrendt (Mrs. Ed. Giedemann), grew these exceedingly large tubers from seed many years ago, she never used fertilizer on them, except for repotting, not too often, in good soil rich with leaf mold. It is her theory that we repot our tubers too often, thus weakening them, and that fertilizing often does more harm than good. When looking at these plants in full bloom, one is not inclined to question her methods. We often "fuss" too much with our plants when they are trying their best to get used to their new homes, and so they get disgusted with us and quit. Three of these tubers are from nine to twelve years old and vary in size from a large duck-egg to that of a teacup. A purple Slipper "Glox" which she grew from a leaf is now twenty-six years old, weighs approximately eleven ounces and is eleven inches around. But still more interesting are the three Mrs. Giedemann grew from seed which are now going on thirty-two years. Can anyone imagine the years of pleasure these "Glox" have given our community during the passing of all these years? Of these, Emperor Wilhelm dark-blue with a white border, weighs thirteen ounces and is fourteen inches in circumference; Emperor Frederick, red with a white border, weighs eleven ounces and measures twelve inches in girth; Brunhilde, white, but about only half as large. I saw the latter last fall, lovely in its purity and loaded with bloom and bud. It is from these ancients (giants in the "Glox" world), that Mrs. Ahrendt, who now has them in her farm home, has gathered much seed which, even now is growing into lusty young plants in many homes of those who were fortunate enough to be able to get some last season. I think we should be justly proud that such a strong strain is now in existence and that others of us may now grow these lovely flowers for ourselves. We should be encouraged to ever press onward in our efforts to grow our plants, not knowing the outcome—for little did Mrs. Giedemann think when

(Continued on Page 60)



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**A Westerner's Appraisal of Mrs.
Buxton's Begonias and How
to Grow Them**

By ANNIE C. ROBINSON, Fallbrook, Calif.

• After our long wait, Bessie Buxton's "Begonias and How to Grow Them" is off the press, and at last we can give our much worn edition of nineteen thirty-nine a well deserved rest, while we bring our knowledge of begonias up to date, in this, the revised edition.

We will meet all our old friends, more beautiful and interesting than ever, and not parading under just any name, but stepping to the front with their very own. It has taken much research and long comparisons to establish these names, but it is all there, so now we can feel sure of them. We will meet many newcomers also, varieties that are persistent, and species from other lands that add much interest to our collections.

Among the splendid illustrations, there are some, we will recognize but many are new, with a clarity that gives wonderful detail of the plants shown.

There is my formula, and your formula, and many others, for compost, depending on one's preference and location; just read and take your choice. And as for the few pests that begonias have, when Mrs. Buxton finishes with them, they haven't a chance.

Those of us that love to explore into the unknown by making crosses and raising the resulting seedlings, in search of new and more beautiful varieties, will get much valuable help.

Should we be growing plants for exhibition, we may learn what the judges are looking for, and should we be judges-well, there it is in black and white.

The appendix is up to date to the last minute, and if we want to know where to get begonias, there we will find that information.

Though Bessie Buxton's experience has been in the East, her interest in begonias has familiarized her with Western conditions also, and "Begonias and How to Grow Them" is truly a textbook for all begonia lovers.

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VENTURA GARDEN MAKERS CHALLENGED

By IRENE NANCE, Theodosia Burr Shepherd Branch, Ventura, Calif.

● At the February meeting Mr. Clarence Hall presented his ideas for "Beautifying the Home Grounds." He challenged the local gardeners to compete with the gardeners of the past who made Ventura the cradle of the now vast California seed and plant industry. Besides emphasizing the importance of determining the correct seeding procedure for plants to obtain good results, Mr. Hall stressed the development of personality in gardening and gardens.

One means of making shade gardens more interesting is to utilize appropriate bark, logs, redwood and even beach driftwood for unique and lovely plant containers for gardens, porches or lathhouses.

The recently inaugurated nomenclature table continues to be a center of interest to the members.

East Bay Branch:

Members of the East Bay Branch are looking forward to staging the best exhibit ever arranged by them at the forthcoming *Oakland Spring Flower Show* which the whole "World and His Wife" generally plans to attend. Our member, Mr. Howard Gilkey, is the renowned Flower Show designer. At the January meeting Mr. W. G. Talbott, Rex Begonia specialist, spoke on the propagation of this type of begonia. He prepared cuttings for anyone who wanted them in pots made from milk cartons.

Mr. and Mrs. H. L. Swager of the East Bay Branch are traveling in Mexico. The tour is expected to be productive of new varieties of begonias from that part of the country.

Officers of Calif. Heights Begonia Society:

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Vice-President: Mrs. Ann Smith, 250 East Home St., Long Beach 5, Calif.

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**FUCHSIA GETS HER SHAPE
IN MARCH**

By OLIVER KEHRLEIN

*Author of "Fuchsia, Ballerina of the Garden,"
to appear shortly*

• The quality of a fuchsia plant and the shape it will have is determined by the care you give it during the month of March. But before starting this training, there are a few chores which have to be attended to. If pruning was not completed last month, get done with it before the sap starts flowing.

This is the time to renew the mulch on the fuchsia beds—4 to 6 inches of manure should be worked lightly into the top soil. Include a complete fertilizer containing root stimulating hormones, such as Plant Chem, as the winter rains have leached out all of the soluble chemicals and hormones, and the soil bacteria have not yet started to manufacture a new supply.

Make all stakes firm and check all ties. Write new labels for those which have become illegible and see that every plant has its tag. Continue to pot rooted cuttings as they become strong enough and repot young plants as they outgrow smaller containers. Potted plants can come out of winter storage and be hardened off and given a new coating of mulch on top. Keep these potted plants in a protected place to prevent March winds damaging them.

Replace worn wires of hanging pots and renew screw-eyes from which they will hang. As vegetative growth will be starting, begin to feed all potted and tubed plants with a fertilizer rich in nitrogen. Feed fuchsias with a plant food in liquid form and weak enough not to burn either the fine new rootlets or the tender stems.

The training of the plant starts with the tying up of the first little leads before they begin to bend. Any attempt to straighten out a bent lead may result in cracking or breaking of the twig. If it cracks or breaks, you will have to start a new lead, but meanwhile you will have forced growth into the laterals by driving the auxins from the lead. If you want a tall plant, pinch off the tips of all side branches, but if it is a low broad shrub you are after, then pinch the tip off the main lead and encourage the laterals. The more frequently you pinch, the more compact will be the ultimate plant.

• The reprints of the TUBEROUS BEGONIA BULLETIN are now available at 15 cents each from the Membership Chairman, Mrs. Mary Ellen Clark, 1618½ West 52nd Street, Los Angeles, Calif.

Heating The Home Greenhouse

By W. C. DRUMMOND, *Hollywood, Calif.*

● Many of our members now own, or are building small greenhouses for specialized plants, such as orchids, other tropicals, begonias of all sorts and seedlings.

The question arises, "How shall we heat it?" A greenhouse without heat can hardly function as a greenhouse. In fact the range of temperature between the outside and inside is so narrow for some houses, that without artificial heat, if there is any frost outside, one will likely have near frost inside.

There are other methods of heating, such as open flame gas, electricity, steam, hot water under pressure, and forced hot water circulation, each having their special advantage, but none of these will be discussed here.

It is assumed that the greenhouse is already built according to standard specifications, and not of window sash, which would hold water on the roof, and also leak air where joined.

The cost of operation and construction of a low pressure circulating hot water, and the use of gas, will depend largely on the ingenuity of the owner. To keep the cost within reach of the home owner, as well as to explain the construction and operation, will be the endeavor of this paper. There can be no question that when properly installed there is no superior heat for a small or large greenhouse. It is economic to operate, and can be made absolutely automatic, as well as safe to plants and operation.

The greenhouse size here described is 10x15x7½ high. How much material will we need? This will depend on several things, for one, the tightness of our glass and greenhouse generally. If glass is loosely fitted and there is a quick interchange of air, we surely will need more pipe for radiation. It also will depend on what temperature we wish to maintain inside, and how cold will the outside be. The location of the greenhouse as to wind and shelter has much to do with heating. The angle of the glass to the sun and the amount of sunshine received has to do with heating. The nearer the glass is to right angle of the sun's rays the more radiation will enter. Also how our system is constructed, if it is a plain low pressure gravity circulation system, as here described, or will we use pressure and forced circulation. The amount of glass in square feet will be the basis of determining the amount of pipe needed for

radiation. Whether the glass extends below the benches, and whether it is a leanto greenhouse also will affect the amount of radiation necessary. There are so many factors affecting the amount of pipe needed it is impossible to say with accuracy how much will be needed.

Without first learning the amount of radiating pipe needed in my own greenhouse, I set only 125 feet of a combination ¾ in. and 1 in. pipe. This I soon found insufficient, and really uneconomical. I could only raise the temperature about 25° F. above the outside. Part of this 25° F. represents reserve heat normally carried by the greenhouse overnight, which meant with 32° F. outside, the best I could get inside was 59° F.

The temperature needed will depend on what we wish to grow. That, of course, you must decide. Our heating apparatus should normally have a capacity to carry 70° F. in our greenhouse. In my construction much second hand pipe was used. Black cast iron pipe is probably the most desirable, and has been known to be in use for 25 years. Steel can be used, it is cheaper but it rusts and interferes with radiation. Galvanized pipe does not rust, costs more but lasts longer. The complete outlay can be built of copper, which would be more durable and economical with no electrolysis, but the original cost higher.

Modifying Factors

In a small greenhouse in a mild climate where the daytime temperatures are high, one can, to some extent, minimize the extremes of night and day temperatures without heat. In cold climates, however, with low daytime temperatures the benefits will be smaller. The following descriptions work, to a large extent, on the principle of the fireless cooker. Concrete benches and side walls up to the benches will help. Tight construction allowing little air change will help, although no matter how tight it is there still will be radiation through the glass. In my own greenhouse I stored a large amount of rain water in gallon bottles under the benches. I found this acted as a stabilizer of temperature. It takes a large amount of heat to effect a change in water temperature. The unit of heat measure is the gram-calorie and is defined as the amount of heat necessary to raise the temperature of 1 gram of water 1 deg. C, which is spoken

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of as a calorie. A gram is about 20 drops of water. The B.T.U. is the British Thermal unit and is the amount of heat necessary to raise the temperature of 1 lb. of water 1 deg. F. Water takes up and gives off more heat in changing its temperature than any other substance. Its specific heat is said to be high. 1 gallon of water weighs about 8 lbs., 100 gals. = 800 lbs. To change the temperature 1 deg. F. would take 800 B.T.U. To change it 5 deg. F. would take 4000 B.T.U., so with 100 gals. of water there is quite a resistance to temperature change. Of course, once the water has reached equilibrium it ceases to take up or give off heat.

Thermostat and Thermometer

Besides the pipe you will need a thermostat. If it is for gas be sure it is of ample size for your furnace. The thermostat can be electric. One used on chicken brooders will do for this size house. The thermostat must conform in size with the B.T.U. of the furnace burner. They usually sell for around \$6.50 to \$7.50 for gas. Place the thermostat overhead, and not closer than two feet from the glass, and where it will not be continually wet. It regulates the flow of gas to the furnace, the gas must pass through it. By trial and error, adjust it to the temperature you wish in the greenhouse.

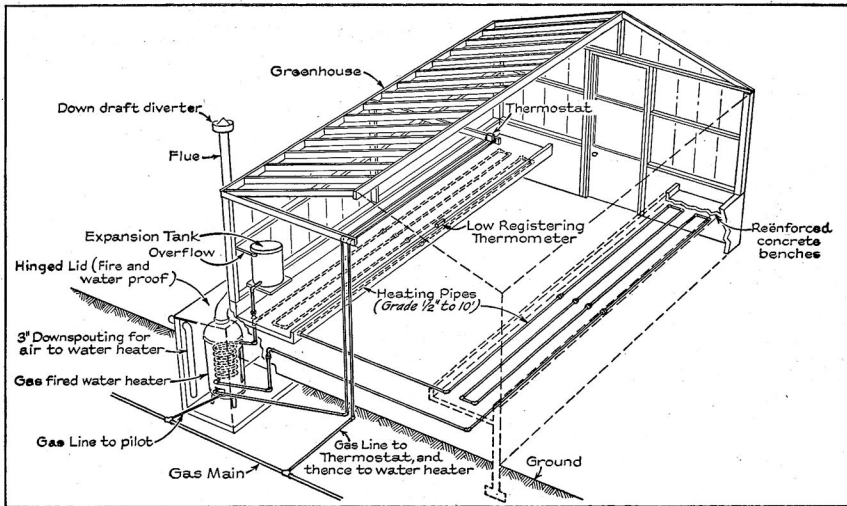
We will need a thermometer. Both should be out of direct circulation of the warm air of the pipes. The thermometer is best located in the growing bed.

Furnace

You will need a copper coil for heating the water. A new one for this size house should be purchased for \$12.50. Mine is an old one, given to me by one of our good members. It is what is known as a "side arm" heater off a domestic hot water tank. Should you decide to use an old one, be sure it is not damaged, that it has a cast iron casing or jacket, with door and vent for flue attachment.

Should it be stopped up with lime, then slowly pour 2 or 3 ozs. of commercial hydrochloric acid through it, and when it quits foaming, wash out with clear water. Do this outside in yard, and before attaching. Do not use hydrochloric acid on iron or galvanized pipes. Before buying a furnace, find the B.T.U. needed. This will govern the size of furnace needed.

It should have a properly fitted burner. Adjust burner and pilot before setting up in pit. Do not use a "side arm" heater for greenhouses larger than 9'x10', as it is only



We are indebted to the Los Angeles Gas Company for the cut of this Home Garden Greenhouse made to Dr. Drummond's specifications. The Author will welcome comments and inquiries that may help builders to success.

by the best of construction and using all advantages that we can get a temperature of 70° F. with outside temperature at 32°, and a burner not properly adjusted will not heat the water correctly.

You will need possibly 5 unions and 3 TEES for the job. There should be a union at the top and bottom of the furnace copper coil. The other unions will be conveniently placed in the system of radiating pipes, should we need to take it apart or add more pipe. We will need 5 or 6 U's to make returns in the radiating system.

Expansion Tank

You will need a 5-gallon expansion tank. A 3-gallon might do. An old ice cream tank is ideal. Cut a hole in the bottom end large enough for a 3/4 in. pipe, and attach a rubber washer first, then an iron washer, then a nut on each side of the 3/4 in. pipe, to keep from leaking, and you are ready to attach it. For larger systems the expansion tank should have a capacity of at least 5% of the system's water capacity. The expansion tank should be located at least three or four feet above the highest part of the system. You will save gas by having it located in the greenhouse. The expansion tank permits the gases and air to escape from the pipes. It also permits the expansion of the water when heated.

There is some choice of location on attaching it to the system. Whether we attach it to the highest point of the flow pipe, or on

the return pipe to the furnace. It seems, when attached to the bottom, that the system heats up quicker, but in that case there should be a valve or bleeder put into the highest spot of the system, to permit the gases to escape. These gases do create rust. If there is a pocket of air in the pipes the water cannot circulate. Bleeders can be added by drilling a 1/4 in. hole and placing in a valve. By attaching an overflow pipe to the expansion tank, about 6 inches below the top of it, the overflow can be controlled.

You will need a pilot light to ignite the furnace. It should burn high enough not to be easily blown out, and should be located above and near the burner. It should burn continuously. Adjust it, and the furnace, as to location of pilot and flame of burner before placing in the pit.

You will need a 3 in. or larger galvanized vent pipe for the flue. Be sure to insulate it near the furnace. It should be large enough for the size of furnace. Attach a down draft diverter on top. This prevents the wind from blowing down. Run the flue above the top of the building. Insulate it where it touches wood so there will be no fire.

We will also need a pipe to bring the gas from house to the greenhouse. For this use a 3/4 in. pipe. We are using gas for heating because it is cheaper and can be made so automatic. Run a small line direct to the pilot and one to the thermostat.

(To be continued)

B. ERYTHROPHYLLA, NEUM

By ALICE M. CLARK, San Diego, Calif.

• There are two reasons for drawing an old familiar favorite this month: first, because it happened to be in bloom just now and second, to draw attention to its correct name. Before 1880 it was introduced to this country as an unidentified plant by John Feast of Baltimore, so it took his name. It was described by Neuman in *Revue Horticole* in 1847 as *B. erythrophylla*, a name from the Greek meaning "a leaf with red coloring," which is a far nicer way of drawing attention to its red lining than to call it "Beefsteak Begonia."

Actually, the same plant was described by Otto in 1849 as a hybrid between *B. manicata*, Brong. and *B. hydrocotylifolia*, produced by Von Warszewicz and bearing his name. We should be thankful that Neuman's account takes precedence, being two years earlier than the German delineation, as few tongues could take the kinks in the Polish name, even though it is too bad that the originator should lose the credit for such a fine begonia.

Chevalier, in *Les Begonias*, gives a touching story of how this begonia wandered like an exile, without name or country across the ocean to the United States where it found a label and a home with which it became so closely identified that it was reintroduced to Europe by its American name. It is listed in Bailey as *Feastii*. In *Die Begonien*, it has the same heading, though Fotsch mentions the description by Otto, and the possibility that it was the same plant. He seemed unaware of the earlier account by Neuman. At any rate it has been a doughty traveler, and after proving its merit by surviving these hundred-odd years it should certainly be given the courtesy of being called by its appropriate and euphonious name. Surely if I can paint it you can pronounce it! Try it slowly at first, e-ryth-ro-phyll-a. Now let it trip off the tongue like a musical phrase and relegate the name of Feast to the days of bustles, where it belongs.

The memory of *B. erythrophylla* is closely woven into the cloth of my youth, when it stood in a jardiniere (of too ornate pattern) in a sunny window and thrust its rather worn and rusty rhizomes over the edge of its container. Usually covered with green leaves, like a Chautauqua meeting of green umbrellas with red linings, it never failed to thrill me when, in early spring, while the outside world was mantled in snow, it thrust up a forest of pink bloom that unfolded like elfin peach trees.

So I love everything about this begonia which had no name in our house except "Grandmother's Favorite." As I sketch it now I note the corky sections of the branching rhizome, ever creeping towards the edge like a greenish brown caterpillar. Both leaf and flower stems rise directly from the base. There are patches of very short red hairs on the petioles and on the veins of the leaf, underneath. They are thicker near the base of the leaf, reminding one of its parent, *manicata*. The veins are light against the dark green of the top and are raised in ridges below. The shape is round with a slight point and the lobes fit together so neatly where they are cut to the stem that they really seem to be peltate. These characteristics together with thickness and toughness are like those of its other Mexican parent *B. hydrocotylifolia* (meaning water-cup-leaf, does that make it easier?).

This sketch is of just a small part of a large plant grown in a lathhouse by a friend who has wonderful success with this variety. The leaves are six inches across now which is its poorest season. Fotsch mentions a type with smaller leaves and I think he is right as I have two that differ in that respect. The leaf stems are a soft light green.

The flower stalks are a rosier color than the peduncles and covered with hairs as fine as cob-webs. The buds are bound in tight light-green sheaths when the stem is short, but as it attains its full height of twelve inches or more the inflorescence starts its one-sided development, customary in the rhizomatous types. The lower fork opens its blooms first while the other side carries them on up in graduated tiers. Both flowers have two petals, though the male usually drops before it opens. They are a light pink both on the wings of the seed pods (which are practically even, contrary to Fotsch) and the blooms, with touches of green in the buds and the center line of the ovary.

Mention should be made here of the variety of *B. erythrophylla*, known as *B. Bunchi*, which was probably a sport introduced by a man of that name in Freedonia, Kansas. It has lighter colored leaves, curled and crimped at the margins. Chevalier warns that it should be propagated from the rhizome instead of the leaves if it is to keep its curls.

The begonia of this type, known as *conchaefolia*, is pictured in *Les Begonias*. It
(Continued on Page 63)



B. x ERYTHROPHYLLA, NEUM

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(From Our Library)

By ELEANORA CROWDER, Librarian
American Begonia Society

● February 7, 1946, was an event in the literary world of begonias for on that date was published the new book, "Begonias and How to Grow Them," by our honorary vice-president and co-editor of THE BEGONIAN, Mrs. Bessie Raymond Buxton. The book has been eagerly awaited by all our members since early last year when it was originally announced by the Oxford University Press.

The librarian of the American Begonia Society is prepared to supply copies to all who send in their orders. The spring announcement in the publisher's catalog for 1945 gave the price of one dollar and seventy-five cents but the publication price for spring, 1946, is two dollars and twenty-five cents. The discount allowed for quantity orders is to be used to buy more materials and research information on begonias for the library which will benefit all members. The directors from the branches are asked to take orders from their groups and obtain copies from the librarian at the Board of Directors meetings. This will save a great deal of work and time for those branches which are able to send representatives to the Board of Directors meetings.

Program Suggestions for Branches Far From Speakers

By VERNA PATEMAN

Secretary, Santa Barbara Branch

● The January meeting was rendered interesting with a discussion on "Winter Care of Fuchsias," by Mrs. Thelma Sommerfield, one of the members. Part of the program was dedicated to Questions and Answers.

Cuttings were exchanged with direction on how to take care of them. At the February meeting a member presented the Hints for the Month; two plants were introduced and discussed with "The Problems of the Amateur" as topics, which were of considerable interest to the members and guests.

GLOXINIA EXPERIENCES

(Continued from Page 51)

she grew these up from seeds that some future day by the efforts of her daughter, clever in plant care, thirty odd years hence their seed would scatter and grow in many far-away homes.

Indeed we can and will grow good "Glox" leaves and tubers in our section from seed. The interest is growing every year.

BEGONIAS IN FLORIDA

By MULFORD B. FOSTER, Orlando, Florida

Author of "Air Gardens of Brazil"

• Although I have grown begonias for the past twenty years in this State, not systematically, nor commercially, I know little of what others do with this group of plants.

I do like begonias, and although I brought back to Florida only a few from our plant expedition in the American tropics, I did bring one very beautiful begonia which Dr. Lyman Smith of Harvard, (Gray Herbarium), says is: *Begonia acetosa*, Vell. He believes this is the first material of the species collected since its description.

I tried to bring *B. digitata* back from Brazil but it perished. A photo of this is shown in our book *Air Gardens of Brazil* which left the press Sept. 3. This begonia was a giant and the flower head reached up to 18 feet in height.

I have grown a few Rex begonias for the past six years but would say that they are a bit difficult for Florida without some means of protecting them from our excessive rains in the summer. So far as I know, no one yet has had any degree of success with the tuberous rooted species. Although, this year, after using a mixture of leaf-mold, sand and sludge and a small part of *Osmunda* fiber, my tubers are doing better than ever before. I am placing them in the same material in which I grow the greater part of

my bromeliads, acid, of course.

The begonias that require the least attention here are the rhizomatous and fibrous types. I have a number of large rhizomatus begonias that do quite well in semi-shaded spots in the garden. Our Florida soils are mostly acid and well drained and I feel quite certain that if I would devote a bit more attention to the begonias we would find quite a number of them that would do well.

I suspect that nematodes, which are quite prevalent in our Florida soils, are apt to be detrimental to the begonias and I feel quite certain that any used in pot culture should have made up soil to be replenished rather often.

I have one small begonia that came with some of our plants from Brazil and it re-seeds itself profusely, becoming a nuisance wherever orchids and bromeliads are potted in *Osmunda*.

Because my greatest interest is in the bromeliads and orchids, I feel that my begonia experiences have not been sufficient to give you data of more real value at the present time.

(A photograph of *B. digitata* will be published in THE BEGONIAN at an early date with a sketch about it by Mr. Foster.) Ed.

TWENTY ROBINS ARE FLYING

By FRANCES DOWNING, Director
Bowie, Texas

• We now have twenty different Round Robins flying with 206 members. New members are coming in all the time.

The Growing Begonias from Seed #1 and The Hybridizing R.R. #1 have started their first flight with room for new members in both clubs.

Choice Ferns #1 now has a director and will start its first flight with five members. Gloxinias and African Violets #2 is in the making. This Robin is proving very popular. "Much is being learned. Satisfactory plant exchanges are in progress and plans for the future" run through all reports. When the new members realize that personal matters do not belong in the Robins another step forward will have been taken.

Sectional Round Robins

The suggestion has been offered that R.R. Clubs be created with members confined to

various sections of the United States. The sections would be made up of States having similar growing conditions. These Clubs will become a fact only if enough members ask for them.

We wonder how many have relatives across the oceans who might want to join in these clubs? It seems like a fine chance of getting unusual information from the old world and maybe in the Pacific Ocean territories.

QUESTIONS & ANSWERS

Q. Some of my begonias grown from slips form bulbs or great knobs at the roots when the plant is about five or six months old. Then the plant does not do so well. What do I do about this condition?

—From Mrs. J. T. A., Stratford, Conn.

A. A plant which develops any form of *root gall* should be discarded and new ones started. Be sure to sterilize your pots before using them for the new plants and use fresh soil that is not infected.

Officers of A.B.S., Riverside Branch, for 1946:

President: Mrs. Margaret Thacker, 4329
Central Ave., Riverside.

Vice-President and Program Chairman:
Mr. R. H. Terrill, 6848 Leland Ave., River-
side.

Secretary: Mrs. A. A. Hensen, 9757 Mag-
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Questions and Answers

By MRS. RUSSEL T. BAILEY, Chairman
San Diego, Calif.

Q. Last year a large percentage of my *tuberous begonias* developed a "whole flock" of little sprouts that just stayed little sprouts. Some of these tubers were still alive as late as August. Were they diseased and should they have been discarded right away?

A. In answer, may I tell you a story of two of our local members, both professional. No. 1 had a failure with her tuberous in a recent year. The plants just did not develop properly. No. 2 begged two of these plants from her. The one she removed from the pot and washed the roots carefully with warm water. She found a very poor root system so repotted in just peat and sand and gave it bottom heat and it developed beautifully. She examined the old soil and found it very rich in fertilizer value and very acid. Then she took one of her own plants that was well developed and with a fine root system, shook off as much soil as she dared and repotted it in No. 1's soil. She expected it to die but it thrived. Apparently the well-developed plant with good roots could take the strong fertilizer and the acid leafmold. The second pot she gave bottom heat "as is" but to no avail. She later gave it the same treatment as the first and it was blooming in two weeks' time. Both tubers developed normally last year. We concluded that No. 1 potted up her tubers too soon—before sufficient root system had developed. It doesn't hurt the tubers to stay in the flat and No. 2 thinks they should never be potted up until the stalk reaches at least four inches and not then unless there is a good root system.

Does this sound logical to you?

Your Q. & A. Chairman invites comment on the above and stories of similar experiments.

San Francisco Branch Receives Impetus

By LILLIAN ASHE, Secretary

● On February 6th we had a very interesting meeting. Despite the rainstorm which started about 6:30 p.m., we had a very large attendance. Mr. Wm. Sharp and Mr. Louis Amendola gave plant culture demonstrations. Mr. Jack Shahain showed us moving pictures, "A Trip to the Fair."

Our members seem to have acquired a new enthusiasm since there has been a change of officers. Last meeting five new members were present.

Our president's name is Mr. George Heskith and his address is 2567 21st Ave., San Francisco, Calif.

To the Seed Fund Fans

By MRS. E. CARRELL, Fullerton, Calif.

• All you armchair explorers gather 'round and we'll tell you the latest news of our adventures collecting begonia seeds for you.

First, thanks so much for the nice letters you have been sending in with your membership fee (\$2 this year). Those who want to get in on the seed for this year had better get busy and send in their names for "first come, first served" is our motto. Don't write us late in the season and expect to get any seed, for it will all be gone.

England, Scotland, Holland and Puerto Rico have our orders and seed should be on the way shortly. Some 40 letters have been sent to foreign countries. The seed on hand is as follows: froebelli, baumanni, Bertini, Picta, #1041, palmaris, Cucullata, sub-villosa, pink calla, red calla, dichroa x Macbethi, Chirita (gesneria). These will be mailed out as soon as envelopes can be had. There will be rex seed too this year.

Help us by saving seed from your own begonia plants and send any surplus to the Seed Fund. Hand pollinate the seeds so you know they are fertile. Seedling plants are inclined to be more bushy and hardy than cutting plants, and many old-timers are glad to get seed of the well-known varieties as well as our beginners in this grand hobby.

Mr. W. F. Harrison of Mexico writes us as follows: "I saved only a small amount of seed of the begonias that I have here, but will send a little of each.

B. gracilis—The A.B.S. thought this might be *gracilis*, but the plant, leaves, etc., do not correspond to their description of the plant. Since I sent seed some years ago to Mr. Kelly you may be able to find out about it. It grows 18 inches tall under good cultivation, several strong branches that more or less make

a round top plant, deep pink flowers of an exceptionally pretty color about 1 inch or more across in clusters on short stems from leaf axils, also produces clusters of bulbils on some leaf axils. Leaves deep green, sharp pointed, reddish brown in center, some leaves nearly all red, others green—tuberous. I have found plants growing about 6,500 ft. elevation, cool, moist, humus soil, blooms July to November.

Rockery Begonia—This is a native here and grows in cracks of rocks in shade. After rhizome attains some size leaves grow separately from tuber, also flower stem not from a common crown, leaves deep green, 6-7-inch stem of flowers deep blood-red in bud, medium to light pink in flower, moderate temperature, plenty of moisture, rhizomatous.

B. heracleifolia—This begonia has big deep green leaves deeply indented, they grow 12 inches across under good culture, an excellent foliage plant with beautiful leaves. Flower stems 2½ feet with big trusses of flowers, deep pink outside, medium to light pink inside. Begins to bloom December, January, February. This begonia wants more heat as it naturally grows about 1,000 feet lower down on mountain."

We have written Mr. Harrison asking him to collect more of these seeds for us, and hope to soon report that we have a supply to send out. Many of you will remember the *B. gracilis* plants that Mr. Kelly grew, he displayed them at the Long Beach meetings some years ago. *B. gracilis* should be an interesting plant to hybridize.

Look up your BEGONIAN for April, 1939, and read the article by Mr. C. M. Kelly on Rock-Loving Begonias, note picture of begonias growing wild on rocks.

B. ERYTHROPHYLLA, NEUM

(Continued from Page 58)

comes from Costa Rica and is really peltate with very small leaves, which are cupped like a clam shell and strongly resemble *B. kellermanni*, except for the low growth and two-petaled flowers. The begonia familiar to us under that name, with spiraled leaves, is really just a helix form of *erythrophylla* and should be so designated.

Where the begonia of our painting is raised indoors in colder parts of the country and perhaps on sun porches elsewhere, it is appreciated, but in California when grown in the open it is a step-child that loses its leaves in the cold and rain and is only admired,

like Cinderella, when clad in its ball-room gown of pink flowers.

All over the country it should be raised indoors in the winter and on a porch in the summer to protect its leaves, where it will stand deep shade. It is a natural for a hanging basket bringing it closer to the eye, where the brilliancy of the leaves and the pink bloom can be enjoyed while the rhizomes carry the leaves over to mask the edge of the basket. The thick leaves are probably responsible for its hardiness in the house. Don't be content with one plant, try a whole row of the related varieties I have mentioned and see if they do not temper the wind and rain of March with their gay bloom.

Glendale Officers for 1946:

President: M. B. Dewar, 709 Milford Street, Glendale 3, Calif.

Vice-President: Mrs. Anna Marek, 604 Orange Street, Glendale 3, Calif.

Secretary: Mrs. Helen Grigsby, 958 Mountain, Glendale 7, Calif.

Corresponding Secretary: Mrs. Carllyse Slattery, 3201 Perlita Ave., Los Angeles 26, Calif.

Treasurer: D. H. Winans, 215 Winchester, Glendale 1, Calif.

National Representative: Mrs. Grace Bayer, 907 No. Pass Ave., Burbank, Calif.

Membership Director and Chairman: Mrs. Isabel J. Mullen, 3464 Atwater Ave., Los Angeles 26, Calif.

Demonstration of Floral Art to Rival Podesta and Baldocchi Exhibition of 1945

● Orchids and other flowers will be flown from Honolulu. Springtime will be shown in all its festiveness and artistic moods at the March 4th meeting of the Southern California Horticultural Institute in the Grand Room of the Elks Club, Sixth and Parkview Sts., Los Angeles, at 7:30 p.m.

Everyone interested is invited to come. If it is desired to have some particularly beautiful or difficult container displayed, it should be brought during late afternoon so that it may be taken in hand by one of the many artists who will be designing the arrangements for the evening.

The Biltmore Florists are in charge of the program with the tip-top floral artists of the southern part of the state. Don't miss it.

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The Southern California Institute has again requested the American Begonia Society to stage the meeting for August this year.

Ours was the biggest and most colorful meeting of last year. We must equal it—if we cannot do better.

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"I look forward to The Begonian each month. The pictures are a fine feature, especially for Eastern growers who do not have as much opportunity to see large collections as some of the California members. Wishing you continued success in your work with the magazine." (Signed) C. M. S., Massachusetts.



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LOS ANGELES 21,

SUCCESS WITH BEGONIAS AS WINTER HOUSE PLANTS

By ELIZABETH H. SKINNER, Dec.
Lynnfield Center, Mass.

• Thinking some other amateur might receive help or encouragement from some of my struggles, I will tell of my house conditions and results on my begonias.

From a child I have always had plants and just put them in earth and they grew, but looking back I have decided they must have been hardy individuals or they never would have survived my ignorant handling. Certainly none of my finicky begonias could have lived through the ordeal.

Most of my plants now are kept in a sun-porch, 9 feet by 15 feet, facing nearly south, with glass exposure on three sides. You see, this approaches the ideal of a lean-to greenhouse but lacks its humidity. This lack I supply by as much spraying as I can find time for and by my home-made humidifier which I feel is of much benefit. A 12-inch milk pan, having in it an inverted clay fern-pot, is filled with boiling water which gives off a fine supply of steam and is quite a surface for evaporation as it cools and remains in the plant room. My *B. multiflora rosea* sits on top of that humidifier and keeps its leaves, which it has refused to do before and is growing nicely.

My plant room has no heat in it except what comes from the living room so I get stronger plants but not such quick growth. The success I have had with my plants I lay to the conditions I am fortunate enough to possess—cool room, fresh air, no gas and plenty of sun exposure.

This winter my begonias and ferns are doing unusually well but the price is eternal vigilance for as the plants increase in number so do the pests—in the same ratio. Begonia mites have proved the most troublesome. So far Rotenone dust and spraying with cold water has been very helpful.

Just at present *B. Preussen* is very lovely with its dark foliage and pink blossoms. *B. Sunderbruchi* is in bloom. *B. acutangularis* (see *BEGONIAN*, pages 30-31, February, 1945), and *Compta* are well branched and fine specimen begonias. Many other common varieties are blooming and numerous choice young plants provide a very pleasant spot to visit when the outdoors has its heavy blanket of snow.

Reprinted from April, 1939, BEGONIAN for benefit of new members, with hope it will lead others to write to Editor of their experiences.



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**CONDENSED MINUTES NATIONAL BOARD HELD
IN MODEL LIBRARY ROOM L. A. PUBLIC
LIBRARY, JAN. 28th, 1946**

Los Angeles, Calif., Jan. 28th, 1946.

Meeting called to order at 7:30, President Hart presiding. Board members present: Messrs. Hart, Hawkins, Nelson; Mesdames Wilkes, MacRae, Clark, Drummond, Librarian Mrs. Crowder, Mrs. Hartwell.

Minutes meeting Nov. 26th read and approved. Bills OK'd and ordered paid.

REPORTS

Reports of Editor and Business Mgr., Treasurer, and Membership Fees read and on motion approved as read and ordered filed as part of the records.

Ways and Means Chairman, Mr. Lawrence, unable to be present.

Mrs. Drummond, Public Relations Director, reported the organization of a new branch of the A.B.S. at Azusa, Mr. Lawrence assisting due to her inability to attend. Further report at next meeting. Other vicinities interested in forming new branches and probably would have more to report very soon on this. Hopes to contact someone in the neighborhood of Lompoc as there is interest there. Information sought. Assembling booklets containing sample by-laws and constitutions and suggestions for use in forming new branches.

Librarian Mrs. Crowder: "Very happy to report that the new Bessie Buxton Book on Begonias is now off the press and I have some with me tonight; the price is \$2.25 and the A.B.S. library will get the benefit of the difference in price which will be used for library expense. Members may mail their orders direct to Mrs. Crowder promptly if they wish the book.

President Hart asked confirmation of his appointment of Mrs. E. Carroll, 214 N. Yale St., Fullerton as Seed Fund Administrator. Appointment approved. See your January, 1946, Begonian for further information.

Reports from Branches Glendale, Pasadena, San Gabriel, Long Beach, Inglewood, Ventura, Santa Barbara, and Hollywood. Good attendance at the meetings; good speakers, and some gains in memberships.

Editor Wilkes reported the new Tuberous Begonia Bulletin would be available again in a few days.

No further business, meeting adjourned to meet again February 25th, 1946.

Gonda Hartwell, Corres. Sec.

MORE QUESTIONS

Q. Should I fertilize my *Christmas begonia*?

A. If you wish and if you are careful not to have the fertilizer in too strong doses. Begonias thrive best on *very* weak fertilizer—no more than half as strong as you would give any other plant. Why not try barnyard tea—liquid manure about the color of weak tea—and water with this every two or three weeks.

Q. Will it kill my tall *Lucerna* if I cut it back? It is growing too tall for it's quarters.

A. It should not hurt it. Mine grows in a bed in my lathhouse and I top it each year when it hits the roof (eight feet).

Q. When using *scharffiana* in a hanging basket, does it make any difference whether you use a seedling plant or one raised from a slip?

A. A seedling plant is better as you get a bushier plant; *scharffiana*, when grown from a slip, is apt to be long and lanky.

Q. How do you pronounce "Clivia"?

A. The "New Pronouncing Dictionary of Plant Names" gives the first i long as in "pine"—Clive-ya.

Q. My *B. odorata alba* is a healthy looking plant but does not bloom. What do you advise?

A. Of course, our growing conditions are different from yours as ours are outdoors the year round but we are told, "If a begonia doesn't do well in one location in your lathhouse, try it in another location." Some begonias require more light for blooming than others. Or the change of location may be a matter of humidity rather than a matter of light.

Q. How do you hold over "*Lady Mac*," one of the *Christmas begonias*, from one season to the other?

—From Mrs. H. W. S., Oroville, Calif.

A. "*Lady Mac*" belongs to the Socotrana group of begonias and they are the hardest of all the begonias to raise, to propagate, and to hold over from one season to the next. Mrs. Buxton's book, "Begonias," devotes several pages to them, ending "then, when—and if—it blooms for Christmas, you will never again begrudge the florist his price, knowing how well he has earned it." In other words, unless you can maintain a constant year-round temperature of 65° to 70° and a 50% humidity, you are not apt to have much luck with the so-called *Christmas begonias* and it is better to leave them to your florist.

Meeting Dates and Speakers

It would be much appreciated if the Secretaries of the Branches would send meeting data to reach the Editor **NOT LATER THAN THE THIRTEENTH OF THE MONTH.**

The next meeting of the American Begonia Society Board will take place in the Los Angeles Public Library, Children's Library Room, Grand Street Entrance, Monday, March 25th, at 7:30 p.m.

THEODOSIA BURR SHEPHERD BRANCH

Tuesday, March 5th, 7:30 p.m.

American Legion Hall
North Carolina St., Ventura, Calif.
Mrs. Wm. Smith, Sec.-Treas.
Ventura, Calif.

BELLFLOWER BRANCH

Tuesday, April 2nd, 6 p.m.

Home of Mrs. Ana Haller, 949 E. Artesia St.
Bellflower, Calif.
Mrs. Ardel Radle, Secretary
920 Flower St., Bellflower, Calif.

SAN FRANCISCO BRANCH

Wednesday, March 6th, 7:45 p.m.

American Legion Hall, 1641 Taraval St., San Francisco, Calif.
Secretary, Mrs. Walter Ashe, 1855 - 33rd Ave., San Francisco, Calif.

ORANGE COUNTY BRANCH

Thursday, March 7th.

College Hall, Santa Ana J. C. 917 N. Maine St.
Santa Ana, Calif.
Mrs. K. D. Burdick, Sec.-Treas., Rt. 3, Box 355,
Santa Ana, Calif.

CALIFORNIA HEIGHTS BRANCH

Friday, March 8th, 7:30 p.m.

Home of Mr. and Mrs. A. D. Stocks, 4127 Walnut Ave., Long Beach 7, Calif.
Mrs. Merle H. Penrose, Sec.-Treas.
4142 Walnut Ave., Long Beach 7, Calif.

LA MESA BRANCH

Monday, March 11th, 8 p.m.

La Mesa Grammar School
La Mesa, San Diego Co., Calif.
Sec.-Treas.: Mrs. Joseph Christofferson
4491 Culbertson St., La Mesa, Calif.

NORTH LONG BEACH BRANCH

Monday, March 11th, 7:30 p.m.

42 East Market St., North Long Beach, Calif.
Mrs. Mary Coon, Secretary,
5511 Olive Ave., Long Beach, Calif.

PASADENA BRANCH

Tuesday, March 12th, 7:30 p.m.

Pasadena Public Library
Lester F. Harrell, Sec.-Treas.
668 Bellefontaine St., Pasadena, Calif.

RIVERSIDE BRANCH

Tuesday, March 12th, 8 p.m.

Home of Mrs. C. S. May, 3121 Mulberry
Riverside, Calif.
Mrs. Helen Hansen, Sec.-Treas.
9757 Magnolia, Arlington, Calif.

LONG BEACH PARENT CHAPTER

Tuesday, March 12th, 7:30 p.m.

St. Mathews School, Second Floor, 7th & Temple
Mary Hotelling, Sec.-Treas.
324A Temple Ave., Long Beach 4, Calif.

INGLEWOOD BRANCH

Thursday, March 14th, 8 p.m.

Women's Club of Inglewood,
325 No. Hillcrest, Inglewood, Calif.
Mrs. Mildred Dressel, Secretary
432 W. Fairview, Inglewood, Calif.
Subject: Soil Analysis and Fertilizers
Speaker: Mr. Manuggian

HOLLYWOOD BRANCH

Thursday, March 14th, 6:30 p.m.

Plummer Park, 7377 Santa Monica Blvd.,
Mrs. Roslyn Duval, Secretary
843 N. Sierra Bonita, Los Angeles, Calif.

SANTA BARBARA BRANCH

Thursday, March 14th, 2-4 p.m.

Neighborhood House, 800 Santa Barbara St.,
Santa Barbara, Calif.
Mrs. Stanley Pateman, Sec.-Treas.
P. O. Box 17, Goleta, Calif.

MARGARET GRUENBAUM BRANCH

Mrs. W. E. Jones, Sec., Willow Grove, Pa.

EVA KENWORTHY GRAY BRANCH

Monday, March 18th

Community House
Tillie Genter, Sec.-Treas.
7356 Eads St., La Jolla, Calif.

PHIOBEGONIA CLUB BRANCH

Irregular Meetings

May T. Drew, Pres.
Box 331, Narbeth, Pa.

SAN GABRIEL VALLEY BRANCH

Friday, March 22nd, 8:00 p.m.

American Legion Hall
720 N. First Ave., Arcadia, Calif.
Mrs. Myrtle Jones, Secretary
132 May Ave., Monrovia, Calif.

NEW ENGLAND BRANCH

W. C. Atherton, Treasurer,
60 Chestnut St., Wakefield, Mass.

SAN DIEGO BRANCH

Monday, March 25th

Hard of Hearing Hall
3843 Herbert Ave., San Diego, Calif.
Mrs. A. P. Carlton, Sec.-Treas.
624 Arroyo Dr., San Diego 1, Calif.

WHITTIER BRANCH

Tuesday, March 12th, 7:30 p.m.

Jonathan Bailey School, Room 19
Comstock Ave. & Hadley Street, Whittier, Calif.
Madeleine Hall, Secretary,
509 Friends Ave., Whittier, Calif.

EAST BAY BRANCH

Tuesday, March 26th, 8 p.m.

Council Chambers, Berkeley City Hall
Dick G. Goodnow, Secretary,
2519 Milvia St., Berkeley 4, Calif.

GLENDALE BRANCH

Tuesday, March 26th, 8 p.m.

329 No. Brand Blvd., Glendale, Calif.
Mrs. Helen Grigsby, Secretary
958 E. Mountain, Glendale 7, Calif.

ALFRED D. ROBINSON BRANCH

Wednesday, March 27th, 7:30 p.m.

Hall, Point Loma Community Church
Udal Street at Poinsettia Dr., San Diego, Calif.
Mrs. Merrel H. Taylor, Secretary.
2838 Chatsworth Blvd., San Diego, Calif.

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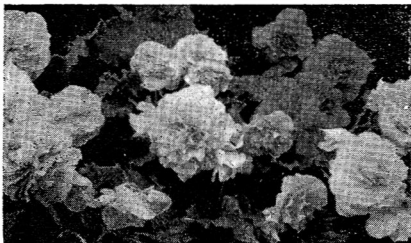
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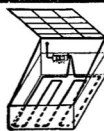
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