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GEORGE W. KELLY, Editor
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Published Monthly. Sent free to all members of the Association. Supporting Memberships $2.00; Sustaining $5.00; Contributing $10.00; Patron $25.00; Donor $100.00. Copyright, 1949, by Colorado Forestry and Horticulture Association.
Nothing gives a good nurseryman more pleasure than to see the plants that he has set in your yard growing vigorously, and nothing makes him sadder than to see his good plants unhappy and sickly because of neglect or improper care. Here are some of the things that good gardeners take care of at this time of year.

**WATERING**—Much winterkill in Colorado is caused by plants drying out. The ground around all plants should be soaked thoroughly before it freezes up.

**MULCHING**—After the soil is soaked a good mulch of peatmoss, leafmold or well rotted manure will help to keep this moisture in and will also prevent too sudden changes in temperature of the soil surface.

**SHADING**—A little shade to prevent our hot winter sun from drying out plants is often necessary. Thinbarked trees like Linden, Mountainash and hard Maple should be wrapped and partly tender trees like White Fir and White Pine should have a partial shade from lath or burlap. Broadleaf Evergreens such as Mahonia and Euonymus may be protected with evergreen boughs or other partial shade.

**TRIMMING**—Fast-growing plants like Chinese Elms and Pfitzer Junipers often need trimming back to prevent damage from heavy snows.

**HILLING**—Hybrid tea roses and some other plants might be protected with mounds of soil thrown up around their stems.

NOW IS THE TIME TO:

- Move large trees with balls of earth, both evergreen and deciduous.
- Remodel perennial beds if the ground is still not frozen.
- Trim deciduous trees such as Elm, Linden, Ash and Honeylocust.
- Build pools, platforms, walks, pergolas, and fences.
- Apply a dormant spray for scale and certain other insects.
- Transplant many hardy trees and shrubs bare root.

Consult your local nurseriesman about these chores. Arrange for him to do all garden work that can be done at this time so that he may be able to give better service during the rush season next spring.

The Colorado Nurserymen's Ass'n

It's not a home until it's planted

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The Colorado Nurserymen's Ass'n

NOW IS THE TIME TO:

- Hilling—Apply the right amount and some other things might be prevented.
- Training—Correct growth and proper function of the organ.
- Shading—Remove the shade and make it the most suitable place.
- Mulching—After the soil is soaked a good mulch of compost, peat moss, leaf mold, etc. are applied to prevent the warming of the soil.

-The ground around all plants should be soaked thoroughly before it freezes over.

**WATERING**—Well mulched in Colorado is cooled by rains during the winter. Watering is not needed unless some of the plants that need a lot of water are at risk of drying out before the spring rains.
LANDSCAPE USE OF ROCKS

The accompanying pictures, and that on the front cover, show views from the garden of Mrs. Beulah Son in Golden, Colorado. Here is a good illustration of the various use of rocks in connection with the landscaping of a home. The location, on the side of a steep hill, lends itself well to the use of rocks and varying levels. Here the natural rocks are preserved and man-shaped rocks are used to give a civilized effect to the plantings.

The picture at the bottom of the opposite page gives a general view from close inside the front gate. This shows the lines of the house carried out in adjoining formally constructed walls, the large group of natural rocks with their naturalistic plantings, and the semi-formal banks covered with rocks and planted with a variety of interesting little plants. The large vase in the distance makes a nice contrast with the natural group of rocks.

The upper picture on the opposite page shows two levels, each designed for living. The upper might be the outdoor dining room and the lower the outdoor living room. Each nook is partly in shade and partly in sun at times throughout the day so that it may be occupied comfortably at any time.

The picture below shows the softening effect of ivy trailing over the formal walls adjoining the summer house. The picture on the front cover shows the attractive gateway, using a different type of rockwork. Adjoining the outdoor living room area is an extensive rose garden which does not show in the pictures.

Photos by Edgar E. Warren.
DR. and Mrs. Kenneth C. Sawyer have developed a very interesting garden around their home at 165 High Street, Denver. Here is found a small rockery under the shade of large evergreen trees, constructed of the rare "Tufa" rock, a small pool in a nook of the rear garden, a charming series of rose and perennial beds and a long view along the south side of the house extending from sidewalk to alley.

The picture on the opposite page shows part of this interesting long view, the one below, the rocks, the upper view on the following page, the formal beds, and the lower picture the little pool. Every foot of this yard is planned to give the maximum in garden satisfaction by the studied use of appropriate materials.

THE VICTOR RIES LECTURE

In spite of conflicting dates and bad weather, about 700 people attended the Victor Ries lecture at the Phipps Auditorium, Oct. 18. Mr. Ries delighted the audience with his excellent kodachromes and lively, informative lecture.

After all expenses were paid there were several hundred dollars left to go towards the expenses of the Association. Much credit is due the loyal members who did such a fine job in arranging this lecture, selling tickets and handling the publicity.

Photos by Edgar E. Warren.
In the history of house plants, none has so long endured in popularity as the ivy. But at no time during these many centuries has it been quite the favorite it is today.

Sometimes it seems as if the hybridizers were making a determined effort to outdo each other in the production of new varieties. An ivy collector can now count his plants by the dozen, and each will vary in some respects from its nearest companion.

Two reasons for the long continued popularity of this fine house plant are its decorative quality and its ease of culture. Manufacturers of novelty containers bear the ivy in mind in creating their wares. Without the complement of these green leaves and twining branches, modern decorative accessories are unfinished. They make the difference between a nice piece seen in a shop and that same piece as an essential motif in the decoration of a home.

As to ease of growing, here is one of the world's few plants that will do well in either soil or water. The masses of an ivy's white roots in a crystal clear ivy bowl or a delicately tinted window sill book end are almost as interesting as the foliage. When so grown the container is best placed near the glass so roots as well as leaves can enjoy the light.

A well drained, loamy soil with humus or granulated peatmoss and a generous pinch of superphosphate added seems the ideal medium for growing potted ivies. Shifting to larger pots is rarely called for if an occasional watering with liquid fertilizer or a dissolved plant food tablet is provided.

Red spider is the ivy's worst enemy indoors, even more so than the frequently mentioned scale. A rusty brown appearance to the leaves, with, in severe cases, a webby look to the undersurfaces, is a sure sign of red spider attack. The remedy is simple. Mix up a warm, but not hot, sudsy bath, using a pure soap, add a half-teaspoonful of 40% nicotine sulphate and a half-teaspoonful of pyrethrum extract to each gallon of water, and dunk the whole plant several times then rinse in clear water at the same temperature. Or better still, don't wait for red spider to attack, but take the plant to the kitchen sink and give it a bath every one to three months.

There are varieties among the newer introductions far more decorative than the old English ivy, or even its smaller counterpart with too much space between leaves and too much vine in evidence. Hahn's Self Branching started a new trend in ivy development and culture, that of a compact, well-filled, not too fast growing plant suited to small pots and hanging containers. There are now several of this type on the market, such as the Spearhead, Pin Oak, Maple Queen, Baby Leaf and the like. For a larger-leaved ivy, of close, compact habit and with considerable substance to its foliage, Sylvanian Beauty is an outstanding variety.

Fancy shape or variegation in the leaves makes ivies even more a decorative asset. The Fan Leaf Ivy is an example of this type. Webber's is a variety with a pretty, crinkly small leaf. Gold Dust is aptly named. Its foliage appears to have been lightly dusted with gold. There are places where the Large Leaved Variegated, the Little Leaf Variegated and Glacier Ivy fit even better than the all-green varieties into the decorative scheme.
HOME FORCED SPRING BULBS
By Myrtle Ross Davis

USUALLY the spring days in Colorado are so chilly and uncomfortable that it is difficult to stay out of doors long enough to really appreciate those early spring flowers which come into bloom so soon after the snow has melted.

I have found a way to get a great deal of enjoyment out of some of these flowers by planting the bulbs in pots in the fall. I place the pots in a cold dark closet in the fruit room in the basement where I water them often enough to keep them damp but not wet. I do this so they will grow good roots before they start to grow tops.

After Christmas I bring them out of the closet and place them on the cool floor of the dimly lighted fruit room and they begin to grow tops. After about a month I bring them into the basement room which has a south exposure but I do not place them in the direct sunlight. In their natural environment out of doors in the spring months they are used to a cool atmosphere so I do not bring them into the warm living room until they are in full bloom.

I have had the best luck with crocuses, hyacinths, daffodils and tulips. The crocuses come so early and do so well that they are my greatest delight. I have had 25 flowers in bloom all at the same time from just six bulbs.

The pots must have good drainage in the bottom for water standing around the bulbs will rot them. I fill the pots with a good sandy loam with peat moss mixed in liberally. The bulbs are planted close to the surface with the tips of the bulbs protruding from the soil in all cases. This leaves plenty of room in the bottom of the pot for good root growth during the fall and early winter in the dark closet.

Hyacinths should be kept in the dark closet until the flower bud is entirely out of the neck of the bulb. The flowers will blast and not develop if they are brought into the light too soon. Hyacinths can also be grown in water in hyacinth glasses but the water must be kept just up to and not around the bulb or they will rot. When grown in water they should be kept in the dark cool closet until the flower is entirely out of the neck of the bulb. This is very important.

In forcing daffodils, the bulbs should be soaked for several hours in water before planting in a slightly richer soil than for the other bulbs. They benefit from 1/2-teaspoonful of super-phosphate to the pot of soil. I have been very successful with the varieties Golden Harvest and the very common King Alfred. Other varieties recommended for serving are Early Perfection, Carlton, Helios, Magnificence, Rembrandt and Scarlet Elegance.

Generally the early varieties of tulips are the best for forcing. I have had the best luck with Advance and General DeWet. They are early short-stemmed and brilliant. Other varieties recommended are Brilliant Star, Apricot Yellow, Ibis, White Hawk, Crater, Kansas, and Golden Harvest.

The early doubles and the big frilly Parrot tulips are not recommended for forcing, although I have seen them forced with fair success.

During the months of February and March when we have our worst weather in Colorado and we are so anxious for spring to arrive, I get a great lift in spirit from a pot or two of these early spring flowers. They are a breath of spring in the dead of winter.
OUT OF THIS WORLD . . .

Robert F. Topp, San Diego State College

Perhaps no growing thing so satisfies man's seeking for beauty as does a flower . . . and no flower does this so strikingly as does the orchid. Fortunately, the science of orchid culture has progressed to a point where any of us possessing the ability to read and follow directions and the enthusiasm to motivate our reading and care of orchid plants can succeed in raising orchid blooms. True, orchid raising is not as simple as raising geraniums, as many would have you believe, yet it is no more complex than a multitude of avocations which thousands of people are enjoying every day.

In the writer's case he had grown nothing more difficult than back yard hollyhocks (which persisted in growing despite his efforts to hoe them out) when he was initiated into the fascinations of orchid raising. This came about quite unintentionally through his wife's interest in the flowers. Having purchased an orchid plant for her, and having been coerced into constructing a Wardian case to provide suitable conditions of moisture and temperature for the plant, he found the occupation so interesting that together, now, they have acquired ten varieties of hybrid Cattleya orchids.

Cattleya orchids are the large, growing blooms with which most people are familiar. There are literally unknown numbers of other types of orchids some of which are easier to grow, some more difficult, but none of which is more rewarding than the royal Cattleya when it produces its lovely blooms. The thrill of seeing a fine Cattleya develop a sheath, and the bursting forth of the blooms somewhat as a beautiful moth leaves its cocoon, cannot be surpassed. Hybrid Cattleyas are often even more beautiful than Cattleya species, and although, slightly higher in cost, usually are more hardy and prolific than the species. We were fortunate in being able to contact a local florist who had a good supply of excellent hybrid orchid plants at reasonable prices. He not only provided the plants but patiently answered our innumerable questions to which we could readily have discovered answers in any of the many orchid books on the market.

The first plant we obtained was one of the most vigorous and beautiful of all our hybrids, the Gordon Highlander, a cross made several years ago. This hybrid produces large showy blooms two or three times a year. Other varieties followed (usually us-
ELDOM does a similar area present so many problems in landscaping as did the building of this garden. We were confronted at first glance by a dwelling with extreme horizontal lines, built precariously close to the top of a precipitous embankment and quite close to the street. Featured in the center was the garage entrance, flanked by concrete retaining walls. This was not an impressive picture.

The problems were:

- To soften the lines of the dwelling.
- To lessen the appearance of height by bringing the lower levels up and drawing the building closer to the ground with planting.
- To give the dwellers some semblance of privacy from the public view.
- To get protection from hot afternoon sun without too much height.
- To camouflage the garage entrance and drive and still leave it useful.
- To bring the maintenance of the area to a minimum cost and physical effort.
- To present a pleasing picture to the public.

NOW comes my favorite time of year, when I may again engage in my best-liked type of gardening— the armchair variety. And what a wealth of good reading lies ahead!

For you fellow readers who enjoy plant exploration I recommend “The Valley of Flowers” by Frank S. Smythe, published by W. W. Norton & Co., Inc., N. Y., 1929, at $5.00. This is the story of four happy months spent amidst some of the noblest and most beautiful mountains of the world — the Himalayas. Mr. Smythe dedicates his book “to all who enjoy hills and the flowers that grow on hills”. That includes a lot of us in Colorado. The sixteen color plates in the book will appeal to our mountain photographers as well as our plant lovers.

Having recently returned from a visit to that plant paradise, South America, I suppose it is natural to be enthusiastic about “The Green World of the Naturalist” by Victor Wolfgang von Hagen, published by Greenberg, N. Y., 1948, at $7.00. South America was explored botanically long before our own country and in his book, von Hagen recounts the adventures of the early botanists from the sixteenth century to the present. The book contains selected writings of the plant explorers with biographical sketches by the author. To those of you who have enjoyed “South America Called Them” by the same author, this book is a “must have”.

An author new to me, and whom I am delighted to meet, is Agnes Rothery. Her recently published book, “The Joyful Gardener” reflects what must be a charming personality. This is a book for pure enjoyment— full of pleasant surprises, humor and sentiment. The chapter headings are intriguing and mystifying. For instance, a chapter on “Animals In The Garden”, headed by a sketch of foxglove, turns out to be unexpectedly an account of the relative virtues (?) of Siamese cats, dogs, turtles, goats and peacocks! This chapter also contains a delightful description of fourteenth and fifteenth century tapestries! The chapter on “The Invisible Dimension” is so surprising that I will not spoil it for you by describing it here. This is a book you will want to read and give. As that time of year draws near when we are reminded on every side to “Shop Early”, I can think of no better solution to the gift problem for the gardener, or for the person who “has everything”, than Mrs. Rothery’s charming book. The book is “gift-y” looking in its dainty dust jacket, and is prettily illustrated by Lee Vitale. It is published by Dodd Mead and Co., N. Y., 1949, at $4.00.

New Book on Wild Flowers


This excellent book by the Curator and Administrator of the Herbarium of New York Botanical Garden treats of 2050 species, varieties and named forms of native plants and naturalized exotics throughout North America. The illustrations in color and in gravure are outstanding. Of the photographs in color twenty-eight are by Harold D. Roberts whose incomparable flower portraits are well known to flower lovers of the Rocky Mountain region.

ALICE WOOD.
A SHORT CATALOGUE OF ROCK GARDEN PLANTS

For Use in the Rocky Mountain Region

By Helen Fowlfr

Presenting a list of plants for use in the rock garden brings up a matter of great importance—which plants to include and which to omit and why. It is easy to understand that the plants used should be dwarf and of a compact habit of growth. The very first Oriental gardens contained only evergreens and other shrubs; they simulated mountain scenery, as the true rock garden still does. Later, however, such plants were included as dwarf saxifrages, primulas, sedums, alpine poppies, and trailing saponarias, with more and more as time went on. The shrubs were those of a hard, stunted, alpine aspect.

Evergreens give character, accent and variety in height to the rock garden, much depending on their varieties and their skillful placing—not dotting them about indiscriminately. To preserve a sense of scale they should be planted near nothing but very dwarf plants. One of the most effective of all dwarf shrubs is the hibernian Juniper (J. hibernica compressa), blue-grey, dense and slow-growing. Cotoneaster horizontalis, of trailing habit, is useful for leading from a possible planting of the stiffer-growing evergreens above, to the lower area where we might find Harebells, Tiarella cordifolia, dwarf Iris, Sempervivums and the like.

The true alpine garden is one where plants native only to the Alps are grown, while in the rock garden, copied from alpine zone conditions, we have mountain and other plants from the whole temperate world. Our copy, then, is from places where plants have a short period, in cool places, with plenty of water in the growing and blooming seasons. Seen at their best, in grassy spaces, you will find the little gems, snowflakes and snowdrops, the Dog-tooth violets and the windflowers—anemones of the pulsatilla group. Close to the rocks and decorated by them, the species Tulips, the wild kinds, of easy cultivation, such as TT Fosteriana, Kaufmanniana, Clusiana and many more are the only kinds suited to rock gardens, where many like to remain for years. Here and there in like situations we might give place to Trilliums, Mertensia virginica, whose pink touches of bloom give way to blue, Crocus, Narcissus, Scilla sibirica and Pushkinia.

Liberty Bailey should be authority enough to settle another question. In upholding the use of perennials for...
rock gardens he says “Most materials are of this type; the short-ness of the growing season precluding the possibility of the full development of an annual.” It is not necessary to feel that annual plants must be used to furnish spaces left vacant by dormant bulbs, for many nurseriesmen, today, are growing pot- ted perennials, which are so easy to slip into these vacant places. The whole galaxy of experts on just this subject, agrees that bedding plants such as petunias, lantanas, heliotrope and the like are absolutely taboo and such commonplace varieties as portulaca, sweet alyssum should be resolutely avoided. Richardson Wright says, “However, it is your garden.” We do know this, that if the wrong plant material is used, the rock garden loses its air of distinction and becomes merely a flower garden in which there are rocks.

Keep the Plants Safe

In the spring push back into the ground any plants the frost may have heaved out and work in a little leaf mold. Lack of moisture at all times, of course, harms the plants but in the month of May especially, could cause permanent injury, when the plants are in active growth. I do not know just what to say about weeding—a hoe will never do; a small hand cultivator might be used to loosen the surface soil—perhaps, if you love your garden enough, you will weed it by hand. When it is time to cut back plants that have finished blooming, allow sufficient foliage to remain to permit of continued breathing and feeding thru the pores of the leaves.

It is so easy in a rock garden for the more exuberant plants to crowd out the weaker, but sometimes chooser ones, the Sedums offend greatly in this regard.

A pool cannot always be managed in connection with a rock garden but if it can the possibilities of beautiful gardening are endless. Allow the Lysimachia to trail right into the water. Lythrum, with flowing liquid purple, Siberian Iris in both shades of blue and white and Iris ocholeuca, that lovely white and yellow-ivy-white, the tall Thalictrum and the noble Gunnera, if given enough space to itself, make attractive pictures, if used in masses near the water’s edge. Not too many admire the hard-yellow, lavelled-topped Tansy (Achillea filipendulina) but it is luxuriant near water.

Many helpful books are to be found in the library at Horticulture House. They will aid in the way of using old species and varieties and suggesting new.

ROCK GARDEN PLANTS FOR USE IN SUN AND SHADE

THE LIST THAT FOLLOWS IS FOR SUN

These lists attached do not aim at being complete. They are to assist the average rock gardener in planting a garden in “The Rocky Mountain Empire.”

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<td>Summer</td>
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<tr>
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<td>Rose</td>
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<td>Summer</td>
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<td>Blue</td>
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<td>White</td>
<td>12&quot;</td>
<td>Summer</td>
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<tr>
<td>Aconoglossum</td>
<td>White</td>
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ROCK PLANTS FOR SHADY SITUATIONS

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<tr>
<td>Aconoglossum</td>
<td>White</td>
<td>6&quot;</td>
<td>Spring and Summer</td>
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</table>

BULBS FOR THE ROCK GARDEN

Grape Hyacinths, Daffodils, Hyacinths, Crocuses, Snowdrops, Snowflakes, Tulip species, Trilliums and Tenuifolium Lilies.
BUILDING A POOL

By George W. Kelly

BUILDING a pool is a hard and technical job, but anyone with a little ingenuity and willingness to work may do so if they will make the plans and preparations carefully. Whether you build your own pool or hire the work done it is well to know the most efficient method of construction. There are two general types of pools; the formal with vertical sides, and the informal with sloping sides. Each type requires a very different method of construction.

The use, surroundings and location would govern very largely the size and type of pool that would best fit into the general plan. If it was desired to have fish or lilies in the pool it should be at least two feet deep in the deepest part, but if reflection from a water surface was the only objective, a foot would be deep enough. Three or four feet might not be too deep if it was desirable to keep the fish or lilies in the pool over winter.

The pool should be of a size so that it would be in scale with the surroundings and neither dominate too much nor look too insignificant. If in formal surroundings it might well be of formal design to fit, but if space permitted an informal setting, it could be

Informal pool at Crown Hill Cemetery, just completed; filled with water, showing no raw cement.
Picture on opposite page from garden of John G. Gates, 300 So. York.
Photo by C. Earl Davis.
planned to imitate a natural pool. The surroundings and trim should be planned to fit together so that all made a harmonious and convincing picture. A pool might be designed to fit in with a rockery or a platform. No two situations would call for just the same plan.

An informal pool should be located in a spot which might naturally contain a pool, this usually being the lowest place on the grounds. There should be room to thoroughly screen out this spot from distracting views which might interfere with the illusion that this was a little bit of nature transplanted into the corner of the city lot. Native plants and native stone arranged as they originally "grew" would help the general effect. The trim of a formal pool might be of the same material as the surrounding structures so that it would give the appearance of "belonging".

When the type and size of pool are determined, there should be a carefully drawn plan showing the exact location and dimensions. After the location is staked out some arrangement should be made for draining the pool. Sometimes this might be a tile to the street or alley, sometimes a connection to a sewer line or provision made for a sump filled with rubble to hold the drainage. Sometimes provision may be made for syphoning out the water through a garden hose if a low spot is nearby. This provision for easily draining the pool is very important unless it is very small.

Informal Type

If an informal type pool is desired the excavation may be made and contours changed to suit, then 4 to 6 inches more excavated from sides and bottom to allow for the thickness of the concrete walls. With this informal type there should be no sharp corners or vertical walls, as the concrete is "plastered" in rather than being poured. In heavy clay soil it is good practice to dig another 4 to 6 inches deeper and tamp in a "cushion" layer of gravel or cinders. This allows for some expansion and contraction of the clay from moisture or frost without danger of cracking the pool.

First arrange for the drain pipe with threaded connection to be set flush with the bottom of the lowest spot and into which an upright "automatic" drain pipe can be screwed. The top levels should be established and stakes set every couple of feet. Several permanent level stakes should be set farther back to check by later.
for small pools or heavy fencing for larger pools should be cut and fitted. Make provision to have the concrete mixed as fast as wanted, then throw in about an inch of the rough concrete all over the bottom and sides. Next, carefully place the reinforcing material and drain pipe and begin to fill in the other 2 or 3 inches of rough concrete over the reinforcing material. This may be a rather rough mixture of about 1 to 6 and may be roughly shaped over the bottom and sides with shovel and trowel. Then plaster on from ½ to 1 inch of finer concrete mixed about 1 to 4 with waterproof cement. Very carefully trowel this out to the shape desired. If a really informal effect is wanted arrange to make a shoulder on the top that can be covered with sod and set in any rocks desirable on the edge so that they do not extend below the water-line. Rocks inserted in the walls of a pool are likely to settle out of place and cause cracks which will not allow the water level in the pool to be maintained. Be very careful in finishing the top of the pool to have it level as you will not be able to fool the water later if it is higher on one side.

The next day after the main part of the pool is made it would be worth while to paint the whole surface with a paste made of waterproof cement and water to the proper consistency. Reinforcing material of chicken wire to handle with a brush. In later years, if cracks appear, they may be filled with this same mixture.

As soon as the concrete has set a little it is well to fill the pool and let it "cure" under water. Afterwards drain and fill several times before putting in fish or plants.

**Formal Type**

If a formal type of pool is wanted, a form at least for the inside, must be carefully and accurately made. Often the natural soil will do for an outside form. The hole should be dug from 4 to 6 inches deeper and larger than the designed finished size. Reinforcing material should be carefully cut and fitted. This reinforcing is more important in formal pools than in informal ones. A large pool might require many regular reinforcing rods so that it will hold together as a unit and not form cracks if the ground around it should sink later. The same preparations should be made for draining as with the informal type of pool and is even more important because pools with formal, vertical walls will not withstand the pressure of ice as well as sloping sides.

When all preparations have been made, pour the floor to the desired

**Informal pool in garden of Frank Seelenman, Arvada Heights.**
PLANT PORTRAITS

The Cotoneasters

By Frank Richard

A FAMILY deserving greater appreciation, the cotoneasters (pronounced koh-toh-ne-ahst-er) include shrubs from one to eight feet tall, outstanding for interesting habit, good foliage and autumn color and especially valuable for their great crops of pink, red or black berries.

Cotoneasters are sun-loving; none will stand wet, shady places. They prefer light, well-drained soils and grow to perfection in sandy to gravelly loams well supplied with humus but will do very nicely in most any good garden soil. Pot-grown plants are sure to establish and are easily planted any time throughout the growing season. Bare-root planting, particularly following long-distance shipment, is not always successful, except with C. acutifolia which is usually handled bare root either spring or fall, while completely dormant and again for a short time after new leaves have grown beyond the "mouse ear" stage.

Unfortunately they are subject to scale, and it’s too late now to do much about scale this year, but scale is easily cleaned up with a dormant spray of miscible oil. Some summers the common cherry slug is a pest but one application of arsenate of lead (1 tbsp. per gal water) controls Mr. Slug.

Most cotoneasters are useful in the border, with C. adpressa reserved for prominent places of its own in formal design. The iron-clad C. acutifolia makes a wonderful sheared hedge and is hardiest of all, dependable in Wyoming as well as Colorado.

The Creeping Cotoneaster, C. adpressa, is an excellent small accent shrub growing in a low dome-shaped mound to 18 inches tall and spreading to four feet. Its sparkling glossy foliage is beautifully patterned on intricately branched recurving twigs in herringbone fashion and the lavish display of brilliant red berries all through autumn contrasts beautifully with its deep-toned autumn color. C. adpressa praecox is a slightly more robust growing form.

The Cranberry Cotoneaster (C. apiculata) grows taller and less spreading than the preceding species, with more open habit, larger leaves, and the biggest, reddest berries of all.

The Sunari Redbead Cotoneaster (C. racemiflora soongorica) grows five to six feet tall in irregularly spreading habit, with markedly two-ranked branchlets forming fan-like sprays of gray-green foliage. Its white flowers are larger than the inconspicuous bloom of all other species but its main show comes in autumn when laden with great crops of dusky red berries. Winter dieback hit this one hard in Fort Collins twice in six years and it is not recommended for severe conditions.

The European Cotoneaster (C. integerrima) is hardiest of the red-fruitred sorts, with wand-like arching canes ascending to six feet. Foliage is bluish gray-green and the berries are at their best in August and September in beautiful strands of unusual smoky deep rose color.

Best known of the clan is the Peking Cotoneaster (C. acutifolia), growing six to seven feet tall with clean, glossy, dark green foliage that assumes fine orange and red autumn color. Heavy crops of shining jet black berries persist all winter, vanishing in a fluttering half-hour avalanche of robins or bluebirds during an April snow. The Peking Cotoneaster takes shearing well and easily merits top-bracket in the 4- to 6-foot range of deciduous formal hedges.

Died’s Cotoneaster (C. dielsiana) is of light and airy habit, to six feet tall. Its branches are slender and arching, autumn color dark crimson. Small coral red berries are studded in greatest profusion down to the bases of the main branches.

Glossy Cotoneaster (C. fo沃olata) is a big, husky, black-fruited variety to 8 feet tall with better (scarlet and orange), and later, autumn color than C. acutifolia.

BUILDING A POOL

Continued from Page 27

depth, including the reinforcing material and allowing some of this material to extend up to connect the walls with the floor securely. When the floor is leveled and finished, lower the forms for the sides and pour this space with the reinforcing material.

Finish the top carefully or apply a plastering of 1-4 waterproof cement and water or several days later apply a pool paint in any desired color.

It does not pay to skimp in the use of cement or reinforcing in constructing a pool, for a pool that leaks can be more bother than it is worth. We should aim to use more water in our landscape plans for this naturally arid country.

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M. J. WEBBER BOTANICAL RESERVE

ANOTHER botanical reserve has been added to the series started a couple of years ago. This includes the property known as the Broadview Nursery operated by Mr. and Mrs. M. J. Webber. It is located 3¼ miles northwest of Arvada on Arapahoe Road just north of the Ralston Road.

Some apple trees are still bearing on this place which were planted by the original homesteader in 1865. The Webbers came here in 1906, built a fine house and started a nursery. A combination of soil, water, location and inherent ability (green thumbs) have enabled them to grow many plants usually considered impossible in this area. Many species of Viburnums, Oaks, Lindens and peonies are growing here, and individual specimens of hundreds of other unusual or common plants.

This association is cooperating with the Webbers and the Colorado Federation of Garden Clubs in establishing this site as a botanical reserve where all plant lovers may come to study plants. The Webbers will continue to operate their nursery as previously but will take time in so far as possible to show interested people where to find the various specimens. The Colorado Federation of Garden Clubs will provide for labeling the plants and the Colorado Forestry and Horticulture Association will provide the marker signs and suitable publicity.

Previously established reserves include three near Colorado Springs and one near Stapleton Drive.
DAMP weather did not dampen the spirits of the group who attended the gardener's auction which this association held Saturday afternoon, October 8th.

City officials had consented to our holding this sale in the Greek Theatre at Civic Center, Clair Robinson and John Swingle acted as auctioneers and many volunteers, including Earl Sinamon, Dick Bosworth, Dick Osborne, Philip Earhart, Mrs. Swingle and Miss Heminway helped handle the goods and collections. Bidding was lively and many items brought good prices, while there were plenty of bargains for everyone. About $500.00 was net from the sales, and gifts boosted this to around $850.00. This amount is about sufficient to balance our budget for the year.

Everyone cooperated nicely to make this event a grand success and all felt that it was a most worthwhile experiment which should be repeated.

Below is the list of donors who made this sale possible.

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JOHN NASH OTT COMING AGAIN

The program committee have arranged for the showing of Mr. Ott's new time-lapse picture, "Our Changing World," at a date late in February. Everyone who saw his picture last year, "Plants in Action," will be anxious to see his new and greater picture. This amazing picture shows scenes from many parts of the world.
NOVEMBER GARDENING

MOST of our struggle with insects and weeds is over for the season, but there are still a few things that we should do.

As soon as deciduous trees are dormant (have dropped their leaves) we may give them any necessary dormant sprays such as lime-sulphur or miscible oil. Oil may damage evergreens and lime-sulphur may stain concrete or wood, so both should be applied by experts.

Not all the weeds are annuals. Sprouts of Chinese Elm and Boxelder are likely to come up all over the garden and grow to good size right under our eyes, in the protection of a shrub or perennial. Hunt these up and get rid of them before they seriously damage better plants. Large trees which are growing too close together or are in poor health may also be considered as weeds, and now is a good time to get rid of them. The longer these unnecessary trees are left in, the larger they will grow and the more it will cost to remove them.

Trimming may be started now on most trees. Maples, Birch and Walnut are more safely trimmed when they are in leaf. Some necessary trimming may now be done on shrubs, but the majority of work on these plants should have been done right after they were through blooming. This does not restrict the bloom for the following year as much as when trimmed later.

All good gardeners will now take time to do their book work indoors: records of last year’s successes and failures, suggestions for next year’s experiments, orders for plants, plans for new developments and remodelling jobs. Now is a good time to study some of those new books that tell of others experiments and experiences with plants.

Plan to attend some of the classes now in progress at Horticulture House on Wednesday evenings. These are planned especially for commercial gardeners, but any one will receive much benefit from them. The only requirement is that you be a member of this Association.

If you cannot come to these classes ask us about arranging talks, classes or demonstrations in your community. Let us help you.

Picture on back cover shows the very effective use of rocks and water in the John Gates garden at 300 S. York.