

# BULLETIN

of the

## AMERICAN ROCK GARDEN SOCIETY

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Vol. 10

OCTOBER, 1952

No. 4

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# BULLETIN

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## AMERICAN ROCK GARDEN SOCIETY

G. G. Nearing, Editor

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### THE EASTERN FOAMFLOWERS

EDGAR T. WHERRY, PHILADELPHIA, PA.

THIS descriptive common name is applied to the genus *Tiarella*, a member of the Saxifrage Family. Those who like artificial common names often call them "False Miterworts," although one could more reasonably term the Miterworts "False Foamflowers." There are two or three species in eastern North America, four in the west, and one in Asia. The leaves of the eastern ones are ornamental in shape (see illustration) and except in the coldest regions are evergreen, taking on bronzy tints in the autumn. They thrive in humus-rich soils, and for several weeks in mid-spring—and sometimes well into summer—steeple of tiny white flowers bedeck the foliage carpet, giving the foamy effect to which the name refers.

For 150 years after it was described by Linnaeus, only one eastern species, *Tiarella cordifolia*, was recognized. In 1903 Small proposed a *Tiarella macrophylla*, but this proved to be based on a sheet bearing an inflorescence of *Tiarella* and a leaf of *Heuchera*, so is not valid. Then one day in June 30 years later the writer observed on the wooded slopes of the Hiwassee River three miles northwest of Reliance, in Polk County, Tennessee, a seemingly different one. This had narrower leaves with more sharply pointed lobes, more copious inflorescences produced over a long season, and no trace of the runners which are so characteristic of the northern Foamflower.

A pressed specimen and a living plant were sent to Dr. John K. Small, but he never got around to studying it critically. Meanwhile Dr. Olga Lakela of the Duluth Branch of the University of Minnesota expressed her interest in the genus, and the writer collected specimens for her from a number of localities in the southern states. In 1937 she named the Tennessee plant as a distinct species, *Tiarella wherryi*.<sup>\*</sup> At the same time she separated the southern Appalachian representative of the long known species under the name *Tiarella cordifolia* variety *austrina*.

In the summer following that in which Miss Lakela's monograph appeared, the writer was exploring for rock ferns on the steep wooded bank of the North Mayo River southwest of Spencer, Henry County, Virginia, and discovered what

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<sup>\*</sup> The current rules of botanical nomenclature call for decapitalization and doubling the terminal *i* in species epithets.



A Foamflower in a shady rock garden  
(Courtesy of the Wild Flower Preservation Society)

seemed to be a still different Foamflower. It had leaves like *austrina*, but in its lack of stolons was like *wherryii*, so in 1940 it was described under the name *Tiarella cordifolia* variety *collina*, with subspecies given as an alternative. When compiling the 8th edition of Gray's Manual of Botany, Fernald combined this taxon\*\* with *T. wherryii*.

So much for the history of the eastern Foamflowers. Now for their interest to the horticulturist. The two taxa which spread by stolons are splendid ground covers for shaded slopes. The original taxon *cordifolia* does best in the cooler climates, while the southern Appalachian *austrina*, which is more vigorous and has glossier leaves, is adapted to regions of warmer summers. Unfortunately, they are not distinguished in the trade. I was once employed to develop a wild flower garden, and wished to have both of them represented, so ordered 100 plants from a New England dealer, and 100 plants from one in North Carolina. When the plants arrived, they proved to be the same taxon. Correspondence yielded an explanation. The one dealer admitted that he did not have any local material on hand, so he sent to the other dealer for a wholesale shipment from that entirely different region. My sponsor thereupon arranged for me to go out and collect the material from the wild myself.

\*\* The term taxon, plural taxa, is relatively new and so calls for definition: it is now being used for a plant or plant-group capable of nomenclatorial recognition. In cases like the present, where there are differences of opinion as to whether certain plants are distinct species, subspecies, varieties, etc., they may be merely referred to as taxa, and allotted a name without raising questions as to their category.

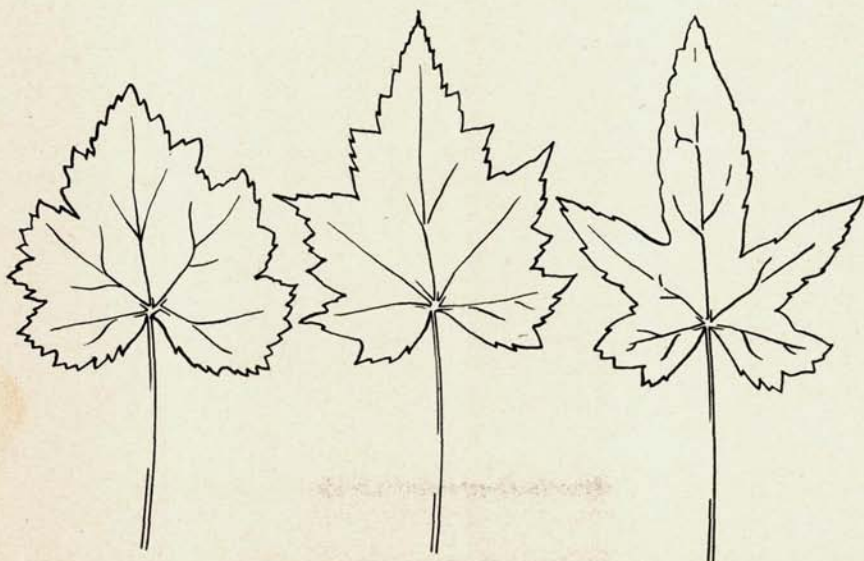


*Taxon collina* does not spread by stolons, but forms solitary clumps in moist, shady situations at low or moderate altitudes from Alabama to Maryland. Since rock gardeners naturally avoid plants which spread by stolons, and so don't stay put, this taxon may prove of some interest, although its need for considerable shade and moisture limits its usefulness. It is worth a trial in regions where the summers are too hot for the northern and mountain taxa. Fortunately, however, *taxon wherryii* has the advantages of both lacking stolons and withstanding the conditions in all but the driest rock gardens, so it may be more fully described.

The clump of *Tiarella wherryii* sent to Dr. Small at the time of its original discovery was grown for a while at the New York Botanical Garden, and when Joseph Elliott was an exchange student there in 1939 he sent some seeds from it to his father in England. A clump grown from one of these received The Royal Horticultural Society's Award of Merit on May 4th, was figured in the *Gardeners' Chronicle* for September 11th, and was described by Mr. Clarence Elliott in the issue of October 2nd, 1948. He noted the attractive shape, color, and texture of the leaves, the creamy pinkness of the buds, and the long blooming season,—from mid-April to September in the English climate. It is, he said, "an invaluable plant for half-open woodland, for cool corners in the rock garden . . . a shade-lover with such charm and beauty as this new *Tiarella wherryii* is indeed a welcome addition to our gardens."

There is actually considerable variability in what I prefer to term the Tennessee Foamflower. Some clones have a brief blooming-period, others keep sending up flowering stalks well into the summer,—although under northeastern American climatic conditions, they rarely continue, as did Mr. Elliott's stock, into autumn. The coloration in the buds varies, and Mrs. J. Norman Henry found well south of the type locality, clones in which they are really brilliant pink.

## Leaves of three Foamflowers

*collina**wherryii*, usual form*wherryii*, deep-lobed form

Drawn by Joseph M. Devlin

There is also variation in leaf-shape, as brought out in the drawing published herewith. The deeply lobed form is a new discovery, made in eastern Tennessee the past summer.

Finally, the question may be raised, where can we get it? This is difficult to answer. Perhaps next year I can supply a few seeds for our Seed Exchange. Possibly some American grower may be willing to propagate it. Meanwhile, maybe we will have to import it from England, where our American natives are more fully appreciated than in their own country.

## GARDEN NOTES, 1952

DWIGHT RIPLEY, WAPPINGERS FALLS, N. Y.

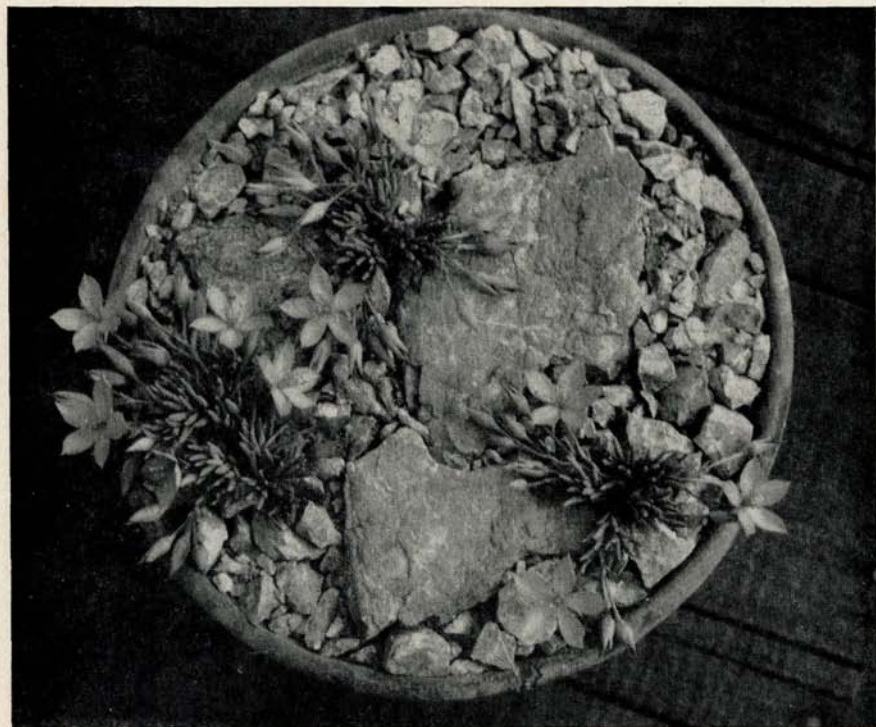
TODAY, July the 10th, was tropically hot, and nothing has been watered; yet, despite this and the fact that the main display has been over for some time, the rock garden manages to maintain an air of gaiety and vigor and looks far from parched. *Asclepias tuberosa*, the Butterflyweed, makes a note of lively orange next to a weeping hemlock, and seems more symmetrical in shape than most plants of its one seas in the wild. It is flanked by the grayish pink umbels and elegant linear foliage of *A. pumila*, a nice contrast. Not far from these, a torrid ledge is occupied by *Zauschneria californica*, a mat of gleaming silver leaves and scarlet trumpets. On a flat piece of terrain perched above the main garden and given over to cushion species and the like, *Dianthus Noeanus* scents the evening air for yards around with its fringed white flowers: it is only just coming into bloom—two months later than its sister pinks. With it is *Silene Echinus* from the screes of Cadmus: rather a disappointment after one has read the collector's description of it as having the "habit of *Acantholimon*, but bearing fine pink Campions singly above glandular needles," yet welcome at this awkward time of year and, had one not anticipated something more remarkable, a pleasant substitute for the departed pinks. In our climate, at any rate, the needles fail to prick and are glandular to the point of looking softly downy, so that the whole thing is merely a lax open cushion of narrow leaves on which the Campions do not so much sit as hover, and are of an undecided shade (though this varies in individual plants). The related *S. falcata*, which we have grown for about five years now, has longer peduncles but the flowers, similarly vespertine, are more solid in substance, ivory-white backed with mahogany. These went over about two months before those of *S. Echinus* started to open.

Another cushion plant in bloom right now is *Talinum spinescens*, collected in eastern Washington last summer. Like all *Talinums*, it has that maddening habit of waiting till three o'clock in the afternoon to open its flowers, closing them again firmly at six, yet it is of such incontestable charm that one must overlook this odd behavior. The other day I was browsing through Preece's *North American Rock Plants* and came across what must be the only "boner" in that otherwise admirable and useful book: his description and photograph of *Talinum spinescens* are in actual fact those of *T. teretifolium*, a short-lived species from the eastern states and one not particularly suited to the rock garden, although the flowers are of a truly fierce magenta enhanced by a boss of golden stamens. *T. spinescens* is far neater, with stubby little green sausages for leaves and a really woody base, and flowers decidedly cupped as opposed to *teretifolium's* that open flat, produced on much shorter stems; and its habitat is the barren



basaltic scablands of interior Washington, where the cold in winter must be intense (so that there can be no doubt about its being reliably hardy; nor, of course, does it hail from the Wenatchee Mountains). *T. okanoganense* was less good this year than in previous seasons, but an unnamed species from New Mexico, collected in 1950, wowed one and all with its tidy blue tufts and large pink corollas at ground-level. Occupying a shallow pan in the alpine house, and set in a frame of white limestone rocks, this exquisite object outshone even its cousin from Okanogan, hitherto regarded as the pearl of the race. There are other dwarf *Talinums* in New Mexico which one day I should like to collect, particularly a very rare one with yellow flowers.

Next to *T. spinescens* is a small plant of *Petrophytum (Spiraea) cinerascens*, seen the same day in Washington, on a cliff near Wenatchee. Although *P. cae-*



*Talinum* sp. from a limestone gravel knoll near Las Vegas, New Mexico

*spitosum* and *P. Hendersonii* are both firmly established in gardens by now, I don't believe anyone has ever cultivated the third member of this intensely saxatile trio. As regards foliage it is almost indistinguishable from *caespitosum*, but the inflorescence is curved as in *Hendersonii*.

Also on this "bunnery" are three attractive *Arenarias*. One, *A. Pestalozzae*, really *does* live up to its collector's description of "remarkable spiny sp., with habit of *Acantholimon*." It affects the cliffs and screes of distant Lycia, and is most amenable when it comes to abandoning its arid windswept home for the tropic vapors of the Hudson Valley—cheerfully exchanging, so to speak, a Turkish mountain for a Turkish bath. The flowers last only a day, and being



half hidden by the long glume-like divisions of the calyx, are not likely to cause favorable comment: it is the plants themselves that hold one's attention—concise, symmetrical mounds of broad, viciously sharp little needles. Near it is *A. Hookeri* var. *desertorum*, named recently by Dr. Maguire, from eastern Utah: a pleasant bun of deep moss-green, with quite visible flowers. The third *Arenaria* is from southern Spain and so violently aretioid that at first glance one might take it for a large pale stone. Known in English nurseries as *A. nevadensis* (an annual weed), its true name is *A. tetraquetra* var. *granatensis*, and it is a notable ornament of those cold black scree that float eight thousand feet above the palms and palaces of Granada. (Close by are two more *Arenarias*, the well-known *A. purpurascens* from the Pyrenees, with glossy, fat little leaves and lovely flowers of an odd shade of mushroom-pink, and *A. obtusiloba* from the Colorado Rockies, a prostrate dark-green mat and one of the few American alpine to make itself at home here.)

In full bloom also is *Acantholimon acerosum*, its grey-blue hedgehogs erupting into quantities of slender spikes, each spike a zigzag timothy of white corollas—very different from the flat pink clusters one commonly associates with the genus. Now over, but an agreeable memory, are: *Echinocereus gonacanthus*, a hardy cactus whose eleven goblets of dazzling scarlet each contained a contrasting apple-green stigma; *Delphinium Geyeri* from the Wyoming desert, intensely blue; *Anchusa caespitosa*, the glory of Cretan Ida, with yet intenser flowers at ground-level, stuck way down among the narrow bullate leaves; *Viola cazoriensis*, that extraordinary shrublet from Spain, with the foliage reduced to tiny linear strips and with Phlox-like flowers of acid pink (this is not too easy); an unnamed Turkish Alyssum—a mass of large gold crosses sitting on a bed of solid silver; and four sorts of *Douglasia*: *DD. Vitaliana*, *laevigata*, *nivalis* var. *dentata*, and *montana*. The last two were collected in 1951 and, though they look happy enough at present, will almost certainly not tarry with us very long—in view of the extreme dryness and exaggerated drainage of their location. *Dentata* (dug from a serpentine slide near Leavenworth, Wash., where it grew with *Fritillaria pudica* and *Lewisia Tweedyi*) bore flowers of violet-carmine over pale rosettes most elegantly toothed, while *D. montana*, from south of Glacier National Park, is the true plant, that is to say, a tight little, bright little dome of green and piercing rose, the blooms held singly and not in pairs (as in the allied *D. biflora*, which usually passes for it in cultivation).

Since we concentrate for the most part on xerophytes, shade plants have been largely neglected in their favor. However, a small shade garden *does* exist, if not exuberantly, and here we hope to see again next Spring the brilliant blue of *Anemone blanda* next to a *Primula Juliae* hybrid, as well as the most subtle charms of *Trillium petiolatum* (collected near Spokane) with its narrow chocolate ribbons cupped in a triumvirate of paddles, and *Stenanthium occidentale's* languid little bluebells of vitreous and unearthly green.

Returning from the West last summer, we paused briefly near Epoufette on the north shore of Lake Michigan and collected *Iris lacustris* (inclined to be temperamental), *Primula mistissinica* (a *farinosa* now in flower in the alpine house), and *Hypericum Kalmianum*, a glaucous, corky little tutsan of rather distinguished mien that shares the Great Lakes' would-be coastal dunes with *Tanacetum huronense*. Both these are in bloom at the time of writing.



## DAFFODILS FOR ROCK GARDENS

G. W. HEATH, GLOUCESTER, VA.

ROCK GARDENERS are awakening to the suitability of the smaller types of daffodil for grouping at the base of rock slopes and walls, or in front of dwarf evergreens. An intense interest in these miniatures has lately grown up in England, and with the latest introductions, fresh from the hands of hybridizers, taking their place every season beside the longer established sorts, America is not far behind.

With few exceptions, most of these dwarfs and semi-dwarfs are ideal subjects for the rock garden, and perfectly hardy. Though not particular as to soil, they bitterly resent "wet feet," roots standing in stagnant water. Another of their dislikes is soil that has been heavily manured.

Dwarf daffodils should be planted in groups, a minimum of three bulbs of a variety, up to 50 or more, depending on the effect desired and the space available.

Planting depth will vary according to the size of the bulbs. The tiny ones such as *Albus* (Angel's Tears) or *Minimus* should have at most an inch of soil, measured from the tip of the bulb to the ground level after the soil has settled. A safe rule for the larger ones is twice the height of the bulb. Therefore a bulb measuring one inch from base to tip of neck, should be covered with two inches of soil. Only northward where hardiness comes in question should any greater depth be tried.

Since there is some doubt as to which daffodils are truly wild species and which ones hybrids, most of them are here given the same form of name as though they were hybrid varieties. To avoid raising false hopes in the minds of readers, only those varieties of which bulbs are now available are described. All are arranged according to their classifications as listed in The Royal Horticultural Society's List of Daffodil Names.

To understand the classification of daffodil hybrids, it is necessary to examine the odd construction of the flower. At the base is a tube which may be so short that it escapes notice, or greatly elongated, like a piece of soda straw. From the end of this tube spring the six divisions of the united perianth, three of which, if they were free of each other, would be petals, three of them sepals. Because they look much like the petals of other flowers, and are closely similar to each other in most varieties, it is simpler to think of them as six petals.

In the center of the flower is the characteristic growth that makes it a *Narcissus* or daffodil. (Daffodil is the common name and *Narcissus* the scientific.) A corona projects forward from near the base of the "petals" and is trumpet-shaped in the typical daffodil, *N. Pseudo-Narcissus*, cup-shaped in *N. triandrus*, nearly conical in *N. Bulbocodium*, or abbreviated into a small ring in *N. poeticus* and *N. Jonquilla*. Endless variations in the size, shape and color of the corona offer hybridizers more scope and diversity than is possible in flowers of simpler structure.

### BULBOCODIUM DAFFODILS

The name Hoop Petticoat Daffodil aptly describes the shape of the enlarged corona of *N. Bulbocodium*, so quaintly different from the other forms. Here the corona becomes the flower, while the petals are reduced to pointed decorations on its outside. The best known form is *Conspicuus*, bright yellow, a strong



Narcissus Minor in the rock garden of E. L. Totten, Ho-Ho-Kus, N. J.



grower and heavy seeder. The height is usually 5 to 7 inches, and the flowers like to hold themselves nearly horizontal at the tips of the many upright stems. Conspicuous does especially well in a lawn, where its seeds usually ripen before the grass requires cutting. Thus quite a colony of bulbs will develop in a few years.

Similar, but pale citron-yellow, is *Citrinus*, preferring a somewhat moist soil, though it will not do well in one that is really wet. Average height is 6 to 8 inches, and the flowers appear a little earlier in spring.

*Foliosus* is creamy white, likely to burst into bloom during any mild spell between January and March: It hardly attains 5 inches.

Still smaller, about 4 inches, but late to flower, and a bright yellow like *Conspicuous* is *Elfhorn*, while *Nylon*, a pure white of 4 inches, when well established often opens in November, otherwise in a warm spell during the winter.

### TRUMPET DAFFODILS

Here the corona, relatively large and long, has a more or less flaring mouth, while the well developed petals either spread wide or hang forward along the trumpet of the usually nodding flower. In form these suggest the common daffodil, *Narcissus Pseudo-Narcissus*, from which or from its subspecies they are mostly derived.

*Minimus* (*Asturiensis*), one of the earliest to bloom, is among the smallest of all daffodils, a perfectly formed miniature of a golden yellow shade, on stalks 3 to 4 inches, reliable and appealing to rock gardeners everywhere.

A rival in size is *Wee Bee*, soft yellow, a welcome Dutch contribution to the miniature yellow trumpets. It flowers much later.

Somewhat larger, up to 6 inches, and much later in the season, *Minor* is also a deeper yellow. The flowers droop pleasingly from leaning stalks, and the mouth of the trumpet is deeply fringed. *Nanus* is paler, smaller and earlier to bloom, but otherwise similar.

Another of the earliest, *Obvallaris*, widely known as the Tenby Daffodil of England, is one of the most perfectly formed of all trumpets and has wonderful substance. The blooms remain in prime condition two weeks to a month. This variety, 7 to 9 inches high, appears equally at home in the lawn or rock garden, provided the soil is well drained.

*Rockery Beauty*, about 6 inches and medium late, is a perfectly formed bicolor trumpet. Opening at the same time as the very large *Lord Wellington*, the contrast is amazing.

Among the whites the old English variety *Cernuus* still holds its own in mid-season, with deeply nodding flowers of purest snow. It reaches 10 inches, well within the one-foot limit which rock gardeners more or less agree upon as the appropriate size.

*Silver Bell*, slightly earlier, is not unlike it, but with blue-green foliage. A clump of these in front of an evergreen shrub makes a picture that is never forgotten.

Of about the same size and season but upstanding, *Alice Knight* proves most satisfactory if given dry feet, while *W. P. Milner*, a greenish or creamy white and a strong grower, is more of a miniature, only 6 to 7 inches, decidedly late.

*William Goldring* (*Swan's Neck Daffodil*) 7 to 9 inches, with white, twisted petals and a cream trumpet, nods in the characteristic curve that its name suggests.

## SMALL CUP HYBRIDS

With corona shorter and broader than the trumpets, and variously cup-shaped or dish-shaped, many of the newest varieties are studies in classic proportion, with delicately contrasted coloring.

Lady Bee, the only pink cup available in this class at present, has a very lovely flower with snow-white petals and a small, longish, clear pink cup. It blooms late, with a height of 9 to 10 inches.

Dwarfer, 6 inches, is Xit, a new, most attractive pure white. The bulbs are still scarce.

## LARGE CUP HYBRIDS

These very modern daffodils are mostly bred for market, but Nor Nor attains only 10 inches, and is a most unusual and attractive subject, opening yellow, while the petals quickly turn white and the cup darkens to orange. The petals spread broadly, and the corona is a shortened, widened trumpet.

## TRIANDRUS HYBRIDS

In this group the corona, instead of flaring out trumpet-like at the mouth, curls inward more or less to a typical bowl-shape. The flowers tend to be small and more than one on a stalk.

Albus (Angel's Tears) grows only 4 to 6 inches, with one to three fuchsia-like, milky white blooms to the stem. One of the best loved miniatures for mid-season.

The later April Tears is larger, up to 8 inches, with several long-lasting bright yellow flowers per stem. After a few days the cup turns white as though frightened by a ghost. The delicate beauty and fine proportions of this variety endear it to all who see it. Hawera, about 7 inches, resembles April Tears, but blooms two weeks earlier.

Raindrop is another miniature of only 4 inches, with late, tiny, exquisite white flowers, a sensation at the shows. Although a strong grower, it is slow to increase, and bulbs are very scarce.

Kenellis, 8 inches, is a most unusual variety in that it regularly produces two crops of flowers, spaced two or three weeks apart in mid-season. The petals are white, the longish cup yellow.

Another exceptional variety is Dawn, 8 to 10 inches, the blooms smallish, elfin-like, with reflexed, wing-like petals, and a flat yellow cup. The only one of its type.

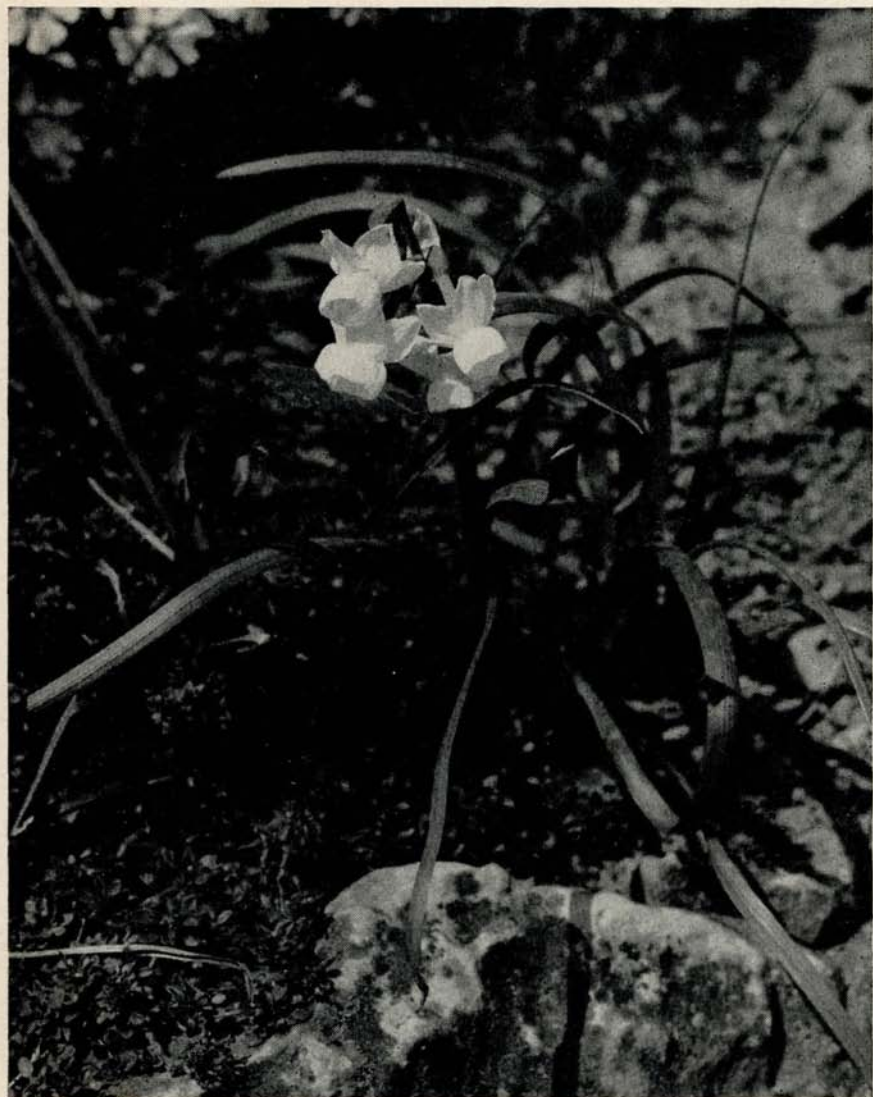
## CYCLAMINEUS HYBRIDS

The characteristic of this group is the turning back and upward of the petals in the drooping flower, suggestive of a Cyclamen. The tiny species itself, *N. cyclamineus*, with a relatively long, slender, yellow trumpet and very small reflexed petals, is slow to become established, as it resents being moved. It thrives in soil that retains moisture (along the edge of a brook, for example) but not where stagnant water will stand. It flowers in mid-season, hardly more than 3 inches high.

Beryl is larger, 6 to 7 inches, decidedly one of the best in its class, with an orange cup, and long yellow petals swept back. A strong grower.

Le Beau, larger still, 8 to 10 inches, is by far the best form of any solid yellow Cyclamineus. The slender trumpet is gracefully set off by a slight twisting of its petals. Somewhat later to bloom is Little Witch, about 9 inches.





Narcissus Raindrop in the rock garden of E. L. Totten, Ho-Ho-Kus, N. J.

### JONQUILS

The flower with typically broad petals and relatively small corona, is delightfully fragrant in most varieties, and there are usually several to the stem.

A very late-flowering form of the old Simplex is Jonquilla Helena, smaller, to 9 inches, equally fragrant, more delicate, a lighter yellow and a strong grower.

Lintie is one of the few red-cupped Jonquil hybrids. The perianth is yellow, the cup orange-red. Stems carry two or more flowers and rise 8 to 9 inches.

Twin-flowered and nearest to true orange in the whole daffodil family, is Orange Queen, fairly early and 7 to 9 inches high.

Tenuior (The Silver Jonquil) is smaller, with a maximum height of about 6 inches, having one to three sweetly fragrant flowers, very pale yellow, to the stem. The corona is reduced to a shallow saucer.

Still smaller, only 4 inches high, is Rupicola, the intriguing bright yellow flower with a six-lobed, flattened corona, and the leaves three-sided. It needs a well drained location.

Equally dwarf is Wateiri, an entrancing small, white, green-eyed flower from Morocco. It must be planted in a very well drained soil.

#### TAZETTA HYBRIDS

Few of this class are hardy, and not many of them dwarf. Halingy and Odoratus, most interesting subjects, are not considered hardy north of Virginia. Canaliculatus, hardy enough, is an extremely shy bloomer.

Cyclataz, a most attractive multi-flowered miniature of 6 inches, with yellow petals and bright orange cups, is hardy in the New York-Philadelphia area and probably farther north.

### GENTIANA ACAULIS

WILL INGWERSEN, ENGLAND

**I**F I WERE a statistician I might try to prove that more words had been written about the glorious blue trumpet gentian than almost any other plant. I am not, however, and I have no liking for making rash statements, but it is certainly true that much ink has been spilled on many sheets of paper by innumerable infuriated gardeners trying to discover the why and the wherefore of the cussedness of this aggravating little beauty.

I have always tried to avoid being drawn into the numerous controversies which have raged from time to time in British horticultural periodicals between those in whose garden *G. acaulis* flowered with glorious abandon, and those, less fortunate, for whom it produced only blind buds and seldom if ever expanded its three inch long, wide-mouthed trumpets of flashing blue. I have suffered and I have been blessed, and I just don't know the answer. It is really quite ridiculous of me to be writing on the subject at all, for I have small hope of being of the slightest help to anyone; but I was asked by the Editor to discuss the wicked behaviour of *G. acaulis*, so here we go.

Let me say first of all that I am at the moment one of the privileged few, for in the rather heavy and entirely acid loam of our Sussex nursery, the plant flowers freely, and every year the wide cushions of deep green, close-packed leaves, are hidden for weeks on end in the early year by hundreds of celestial flowers. The display is often repeated in the late summer to a lesser degree and there are few months during the year when we cannot pick at least a handful of blossoms. I have not always been so lucky. In my own garden, a few miles away and on similar soil—perhaps a little nearer to clay—it seldom flowers, and I well remember, many years ago, planting a wide ribbon of *G. acaulis* along the entire length of each side of an entrance drive, in rather poor loam soil over a chalky subsoil. The drive was ten feet wide, and on one side it flowered with such freedom each year that a pin could not have been inserted between the flowers without touching a petal. On the other side of the carriageway, never a flower was produced!!!



Plants were taken from the flowering side and planted over the road, and ceased to blossom. Other plants were taken from the stubborn plantation and grown with the good brethren, and proceeded to adorn themselves with beauty the very first year. I have no explanation whatever to offer for this phenomenon. The soil was analysed, and proved to be identical on each side of the roadway. I had toyed with the thought that the presence or absence of certain trace elements might have something to do with it, but in view of this, and a number of later experiments, I have abandoned this theory, along with many another.

Everyone in whose garden the plant flowers has his or her own special recipe for success, but these are seldom efficacious when tried out elsewhere. Only one rule seems to be more or less universal if one is to have any success with this fickle jade, and that is the rule of firm planting. Planting in well firmed soil and ensuring that the plants are well rammed in may not be a royal road to a mass of blue flowers, but it is, in my experience, and in that of many other gardeners, an essential factor in the successful cultivation of the plant.

I am certain that the presence or absence of lime in the soil has nothing whatever to do with the problem; in fact, I am far more positive about the factors which do not affect the problem than I am about those which do. Another aspect of this puzzling affair which occupied my attention for some time was to try and discover if there were free flowering and shy flowering forms of *G. acaulis*. I know the plant in one or other of its numerous forms in several of its native haunts, and I have closely examined plants in the wild in an attempt to discover if there were areas in which they did not flower freely, but this didn't work either. Wherever I looked every tuft bore its full quota of flowers. This theory—or half theory, for it was only a tentative thought really, is also disproved by the fact that in cultivation plants taken from an area where flowers are seldom if ever produced and introduced into a more favorable locality, will proceed to flower with the utmost freedom.

As an experiment we used to supply, with every dozen or half dozen plants of *Gentiana acaulis* that we sold, a bushel of our ordinary soil, in which it flowered profusely. This seemed to answer even in barren districts for a short period, but after one or two years the flowers became fewer and fewer and we were back where we started. The only thing I am beginning to feel reasonably sure about is, that the problem is primarily concerned with the soil in which the plants grow. It cannot be climatic, and it cannot be a matter of atmospheric pressure owing to a greater or lesser altitude, for there are many gardens in which it flowers in one spot and refuses to do so in another—*vide* the instance I quoted in an earlier paragraph.

This puzzling situation is not confined to Britain. I am informed by many Americans that they have the same trouble, and gardeners from various parts of Europe also confess to defeat. Only recently I heard of an enthusiastic amateur gardener in Japan who wanted an answer to the same question. It would be interesting to us British gardeners, however, to hear of the experiences of gardeners in America, where there is such an infinite variety of climate, and such extremes of temperature. As I said in the beginning, I make no attempt to offer any advice at all. I frankly admit complete defeat. I have known, and know now, many enthusiastic, skilled gardeners, both professional and amateur, and not one of them has ever advanced a theory which satisfied either himself or me, or which stood up for more than a year or two to exhaustive tests. So what?



## THE BULLETIN IS NOW A QUARTERLY

Although two announcements have been printed, one on page 23 of the March-April issue, the second on page 55 of the July issue, it has not been sufficiently emphasized that the Bulletin is now a quarterly. The change was made necessary by rising printing costs, but far from representing any shrinkage in our service to the membership, it actually increases the amount of reading matter presented in the course of the year. The six issues you used to receive, each containing 20 pages, totaled 120 pages for the year. Now there will be but four issues, January, April, July, October, 32 pages each, adding up to 128 pages.

These extra eight pages must be filled by more of our members writing more articles. Please put your thoughts on paper and mail them to the editor, accompanied if possible by photographs.

## LETTERS TO THE EDITOR

In the July number of the Bulletin there is a request for seeds of *Aquilegia clematiflora*? I presume that the question mark means that it was not possible to trace this name.

In the Bulletin of the Alpine Garden Society Vol. 2, 1933, we find "*Aquilegia ecalcarata* of Hort (ex Stend. Nom 2.1.115) is merely a spurless form of *A. vulgaris* and has been listed in catalogues as *A. clematidiflora*." *A. ecalcarata* of Miss Eastwood found in the Rocky Mountains is, of course, an entirely different plant. A third *A. ecalcarata* of Farrer is a native of China. All these are spurless.

Whilst I am unable at the moment to lay my hands on the actual paper, I believe I am correct in saying that at some time in the 1930s an attempt was made to create a new genus, *Semiaquilegia*, for all the spurless Aquilegias and to include in it certain plants from the genus *Isopyrum*. "*A. clematidiflora*" shows the futility of using this characteristic as a distinguishing feature.

I have grown the plant since 1930 when I obtained the seeds under the name "Clematis flowered Aquilegias." The resulting plants showed that it is not possible to separate this form even as a variety of *A. vulgaris*. Most of the seedlings gave wide, saucer-shaped flowers, white, blue or pink, bearing a strong resemblance to a Clematis. But other plants came normal *A. vulgaris*. Still others carried both spurred and spurless flowers, whilst others had flowers in which some of the sepals were spurred and others spurless. Succeeding generations have provided me with some rather delightful fully double spurless flowers. This double form has none of the dowdiness of the double form of the normal spurred flowers.

I hope to send seed of this strain of *A. vulgaris* for the Seed Exchange, but I must warn intending growers that this is not a plant for the small rock garden, reaching a height of 2 feet. Moreover, only a certain proportion of the plants will be clematis-flowered so that it is as well to grow the seedlings on in a nursery bed until they have flowered, and then make a selection of the best forms.

In view of the fact that this form of *A. vulgaris* has been grown for well over 20 years, it was amusing to find it listed in a well-known seed catalogue the other year as an exciting novelty!

R. GINNS

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The question mark was used partly because of the obscurity of the name, and partly because, being misspelled, it might possibly be intended for some still other obscurity. If question marks are going to bring in letters as apt and informative as this one of Mr. Ginns, we will use more question marks.—ED.



## SKY PONDS OF CHILDHOOD

ELIZABETH HOLLISTER FROST (Mrs. Walter Dabney Blair)  
TARRYTOWN-ON-HUDSON, N. Y. AND NANTUCKET, MASS.

CHILDREN living all the summers of their years on the Island of Nantucket, fall natural heir to sea lore, pond lore, Indian lore, and Quaker heritage. Coming on Indian pipes—we call them fairy smoke—in the hush of the Hidden Forest; surprising the stealthy heathers under the larches and pines in a place no Nantucket child ever names or utters (a stranger might plunder the purple); throwing your first drale for your first Blue into the sea and the sunset at Great Point or Miacomet; careening over the universe vine at Saul's Hills, staring, startled at a sudden sky pond, tremulous and blue, dazzling and circular, silent and secret in a fold of the Commons—all these things companion the enchanted footsteps of Nantucket childhood.

Proper sky ponds, as Nantucket children know them, have no thicket nor high verdure around them. No tree or bush impedes the limpid reflection on their azure surface of the simple azure sky. Floating-hearts rim their tiny beaches, and in the rim of black sand behind the hearts, grow round-leaved sundew—danger sign to insects, upland pinkstar, hedge hyssop, pale-tipped pipewort, red-checked cranberry, white-fringed orchids, infant turtles and ladies' tresses.

Nantucket lore tells us that every sky pond was once a circular ice lump, imbedding itself deeper and deeper into its fold of the frozen moorland, melting from white ice to green ice, from black water to blue water, from shivering green rim to wreath of shimmering flowers.

We who plan alpine gardens, little moors or alpine meadows, might well emulate these flowery pools, descendants from the Ice Age; and should we have difficulty in growing *Gentiana verna*, glacial buttercups and Soldanellas, which haunt the edges of alpine pools in the high melting snows of the roofs of the world, we might find the lowly flora of the sky ponds of our own outpost island more docile to our touch, ingratiating to the trowel, and, if we knew no Nantucket childhood, as sparkling and strange to the eye as the aloof alpinists still partial to the Alps' dazzling cold.

Having no sky pond in any hollow of our own moorland here at our stead-ing, Sherbourne, we devised one last summer, just a stone's throw from the ancient dwelling, in the first swale of the Commons, which roll toward the Smooth Hummocks to the sea. This natural depression (so near the Quaker-square lean-to dwelling, single sentinel of Nantucket's first settlement, now lonely in the open Commons) we call "The Cradle." For these now remote acres, surrounded with ancient cellar holes, are indeed the cradle of the island, where the English settlers of Nantucket raised their first village, naming it, nostalgically, Sherbourne, after the Dorset town which they once called home.

Our sky pond in The Cradle we have circled with natural mosses, turtles, hedge hyssops, orchids and ladies' tresses of the island; but it has also pleased us to plant here the "water dwellers" among the heathers, especially the Dorset heath, which throws rose wreaths around the beautiful salt inlets from the sea called the Lakes of Dorset, and which the forefathers might so readily (but did not) bring from Sherbourne, England, to their Sherbourne on Nantucket Island—that island which they called, in love, pride and homesickness, The Step Between America and the British Isles.



When the builder and the children and I move in the morning and evening dews under the great lintel and over the wide threshold which Elihu Coleman, the Quaker preacher, laid in 1722, we are now drawn, in the footsteps of the forefathers, to our own reflection of the Sky Ponds of Childhood, where we watch the Nantucket fringed orchids and swamp candles flicker—till the next Ice Age—through Sherbourne's rosy ring of the Dorset heather.

#### BOTANICAL KEY TO THE SKY PONDS OF CHILDHOOD

Golden hedge hyssop, *Gratiola aurea*

Small waxy yellow blooms on a three-inch stem, pushing through the wet sand of the pond edge, and blooming enthusiastically and exquisitely from June through September.

Pipewort, *Eriocaulon septangulare*

Whitish, seven-angled stems boast pincushion tops which "look as though filled with white pins." Basal leaves under or near the water. Four or five inches. July to September.

Autumn ladies' tresses, *Spiranthes cernua*

A slender bog orchid with white, fragrant flowers curling around a foot-high stem. Much more robust and beautiful than other *Spiranthes*.

Grass-pink orchid, *Calopogon pulchellus*

A ravishing small pink orchid with fringed lip, shimmering at the pond-edge. One foot. June to July.

White fringed orchis, *Habenaria blephariglottis*.

Small fringed orchids sway on the tapering stem at the pond's rim.

Swamp candles, *Lysimachia terrestris*

Tapers of yellow flickering at the marges. One foot.

Round-leaved sundew, *Drosera rotundifolia*

Small white flowers rise from the sticky, reddish leaves, which glisten in the sun and trap and consume unwary insects. Three inches. July, August.

Thread-leaved sundew, *Drosera filiformis*

Slender scapes of pink flowers rising from glistening, stalk-like red leaves. Biennial or perennial. The *Droseras* are the famous Dew of the Sun of the old herbalists.

Upland pinkstar, *Sabatia gracilis*

Our star-like *Sabatia*, belonging to the gentian family, is as vivid a pink as the alpine gentian is blue. I suspect it of being an annual, but it reproduces itself, even to having an Island pond (don't ask where it lies!) named after it, *Sabatia* pond.

Floating-heart, *Nymphoides lacunosa*

The floating, heart-shaped leaves and waxy white, inch-wide waterlilies open candidly to the sky each bright morning on the pond's blue surface.

Universe vine, *Arctostaphylos Uva-ursi*

A close, leathery evergreen vine, one of the natives which proves the glacial origin of Nantucket. Its tiny box-like leaves, half hidden pink flowers in spring, and large red berries in August make a shining carpet on the Commons all the year through, and garlands for our ponds, and decorations for our houses, more beautiful than holly.

Dorset heather, *Erica ciliaris*

A very showy, somewhat procumbent heath, with large (half-inch) purplish pink bells swaying on the upper three inches of stem. Reminiscent of the tender exotic heaths of the florists. Give protection from rough winds in winter. Late July to hard frost.



## EUROPEAN ALPINE PRIMULAS

MRS. HARRY HAYWARD, SCARBOROUGH, MAINE

THE alpine Primulas of the European mountains are particularly desirable and suitable for growing in rock gardens. Their small size and rosetted forms are designed to fit naturally into the crevices of rock, or as groups on any small plateau in sun or partial shade.

To acquire a collection of these species from plant lists offered in the United States—perhaps we had better say eastern United States—would be difficult, and as the importation of Primula plants from Europe is prohibited, seed sowing is the one and only method left to rock gardeners who wish to include them among the other alpine treasures.

It is rewarding to grow any choice, rare plant from seed. The alpine Primulas are not too difficult. In some species the germination is prompt, in others erratic and often delayed until the second or third year. In preparing the frame or flat, this should be kept in mind, and it is best to plant the seed in such a way as to give every chance for possible germination. If you are so fortunate as to get packets of choice kinds one year, treasure them, for they may not again be available until several years later.

Two kinds have been especially obstinate in germinating the first year with me, *Primula marginata* and *P. hirsuta*. Both came up one year after sowing, when the flat was green with moss. Since the seedlings then came up thickly, it seemed to signify that those particular kinds need the ripening influence of time and water, snow and frost. Other species will appear in a month from planting. The rare *P. glutinosa* has been an example, every seed sprouting, and in my experience *P. glaucescens*, *minima*, *integrifolia* and *Clusiana* are kinds which do not delay their coming too long.

In all the species there is variation in the seedlings, and there will be better and poorer forms among them. Ever present also is the possibility of getting one of the fine natural hybrids between two species, which frequently appear where the different kinds grow intermingled in the mountains, affording an opportunity for cross pollination.

Belonging to the Auricula section of the genus Primula, these small plants have characteristic traits in common. Though the leaves vary widely in size and shape, they are all thick in texture and rather smooth. Some grow in limestone, others are said to shun it in nature. In the garden, with attention given to drainage, fertile soil, some shade and moisture, they can be happily accommodated without too much striving to reproduce the exact conditions under which they grew in the Alps.

Although the development is rather slow, each year will bring some increase in the size of the attractive rosettes. Some are slow to produce flowers, while other kinds faithfully and generously blossom every springtime.

There is a really sizable group of *Primula marginata* in my garden, from seedlings grown so long ago, it covers well over a yard in diameter of a tufa "mountain top." Here is considerable variety in the shape and shade of the flowers, ranging from blue-lavender to pink-lavender, and opening together in the early spring days, they seem very lovely indeed. *P. marginata* puts forth its leaves at the ends of relatively long woody trunks, which can be reduced somewhat by occasional top dressings of good soil and chips, but they should never be actually buried in soil.



*P. hirsuta* has been restored to an older name, and is henceforth to be known as *P. rubra*. Like most, this is a very variable *Primula*. The leaves are vested in brownish hairs which give it a fuzzy, yellow look. It is rather an easy kind to grow. Others possible from seed are *P. Clusiana*, lovely large pink flowers with white eye, *P. minima*, tiny leaves with teeth across the end, and fine pink flowers, *P. glutinosa*, rare and said to be difficult, on which we will have to report later, for there are many small seedlings to experiment with. The flowers, if they ever come, are beautiful blue-purple. *P. integrifolia* is another that can be had from seeds, and there are others still. The true *P. auricula alpina*, though larger than the relatives mentioned, is a desirable plant, the best type having fine yellow flowers and the leaves coated with farina.

The growing of these small *Primulas* has been a satisfying experience, and if a few can be added each year, the garden is thereby enriched, for they are treasures which can take their place among the best.

## IMPORTANT NOTE ON OUR SEED EXCHANGE

Now is the time to send contributions of seeds to our new Seed Exchange Director, Bernard Harkness, whose correct address is 5 Castle Park, Rochester 20, New York. The address printed in the July Bulletin was the best we had at the time. All seeds should be carefully packaged, with the name written legibly on each package. Only species or varieties appropriate to the rock or bog garden should be included. In order that your seeds may be listed, and that you may be recognized as a contributor, these must be in the hands of the Director not later than November 30th. To compile and print the List in time for inclusion with the January Bulletin requires prompt action, which cannot wait for afterthought seeds.

And please don't wait until the deadline. Seeds sent by November first give the Director a much better chance to arrange and catalog them, beside avoiding the rush of Christmas mail.

If for some reason seeds which you are planning to contribute must be sent late, let the Director have their names before the November 30th deadline, so that they can be listed.

## THE BOX HUCKLEBERRY

G. G. NEARING, RAMSEY, N. J.

SO CALLED because of its evergreen, boxwood-like leaves, the box huckleberry, *Gaylussacia brachycera*, though not exactly a rock plant in nature, deserves a place in the rock garden. An American native with a limited range from southern Pennsylvania and Delaware to Tennessee, it was at one time listed among our rare easterners, but more recent explorations have shown it to cover extensive areas of West Virginia. If however the number of individual plants were considered, it might still be accounted rare.

For investigation has shown that each known station, though it may cover many acres of area, is in most cases a single spreading plant, perhaps thousands of years old. Though of slow growth, and seldom rising higher than a foot or a foot and a half above the ground, it has stems which creep beneath the fallen leaves of the open woodlands it frequents, continually sending up new branches farther and farther away from the original root. If this sounds invasive, let me add that the rate of travel is hardly more than three or four inches a season, and several years of progress can be headed back with light pull lifting the untenacious roots.



Sandy slopes at low elevations are its preferred habitat. It accommodates itself to rocks however, perfectly happy in their confinement, unresentful if its outreaching branches are cut now and then for the decorative value of its dark, glistening leaves. Its greatest usefulness is perhaps as a substitute for its close relative, the mountain cranberry, *Vaccinium Vitis-Idaea* in hot sea-level gardens where that otherwise accommodating rock garden gem may languish.

The resemblance between these two plants is indeed striking, though the American *V. Vitis-Idaea* var. *minor* remains more dwarf and compact. If berries appear, as they do plentifully on the mountain cranberry, sparingly on the box huckleberry, no confusion is possible, for the cranberry is red, the huckleberry blue. In the absence of fruit, only a grower who knows both well can tell them apart.



Box huckleberry, *Gaylussacia brachycera*, flourishing in an informal rock wall

Seeds collected in the wild have seldom proved fertile, because the box huckleberry tends to refuse its own pollen, and since one plant covers a large area seldom in close proximity to another, the only pollen to reach it is usually its own. Cuttings root easily though. I believe it was in the nursery of Miss Elizabeth C. White at Whitesbog, New Jersey, that the difficulty of obtaining seed was first overcome. Cutting-grown plants originating in different regions were there brought together and good seed produced without difficulty. The offspring seedlings have been distributed, and are available in some places.



In spite of the fact that this huckleberry is found no farther north than the banks of the Juniata in Pennsylvania, it appears to be entirely hardy wherever tried, provided the necessary shade is given. The Arnold Arboretum thirty years ago had a thriving bed of it to demonstrate its value as a ground cover, perhaps its greatest usefulness.

Rehder states that the species was introduced to cultivation in 1796. Today it is not so well known as it deserves to be, or as one would expect, considering its comparative rarity and the interesting facts of its origin, which have more than once appeared in print.

## NORTHWESTERN UNIT FIELD TRIP

HELEN MORRIS, BELLEVUE, WASHINGTON

THE MOUNTAINS still being under snow in May, the most inviting locale for an early season field trip was the foothills of the eastern slope of the Cascades. A meeting was arranged at Lauderdale, near the south end of Blewitt Pass, for Sunday, May 4th. After assembling we drove south several miles on the Ellensburg Cutoff to a point where we could leave our cars at the side of the road.

Nine of us started off, under the guidance of Mrs. Frank Padavich, who is thoroughly familiar with the territory. We walked up a gentle slope through thin woods which were brightened by the pink blossoms of *Dodecatheon campestre* and *Lithophragma bulbifera* and a white *Mitella*. At the edge of the wood were scattered patches of *Hesperochiron californicus*.

Emerging, we came to an open field, rich, moist and well cultivated—so much so that the plants found there were almost coarse in their healthy growth. The field is undoubtedly a colorful sight when in bloom, but we arrived to find *Fritillaria pudica* dropping its dried petals and *Camassia Quamash* swelling its flower buds. *Balsamorhiza terebinthacea*, another species plentiful in the field, was also out of season.

On the far side of the field the slope continued, and here, in the shade of vine maples, was found the rare *Cypripedium fasciculatum*, a plant more curious than beautiful, with brown blossoms half the size of most lady's slippers. Out in the open, the rocky hillside was splashed with shades of blue, the soft sky-blue of *Mertensia pulchella* and *M. paniculata*, and the deep brilliant blue of *Delphinium Menziesii*. Here and there among them rose the creamy spikes of *Zygadenus venosus*, while small yellow violets peeped out from beside the rocks. Under the trees were occasional sprays of *Pachistima Myrsinites* trailing vine-like down the hill.

On a rocky outcropping above us, our eyes were caught and held by a large patch of soft, warm lavender, the only color in sight. We found it to be a cushion of *Parrya Menziesii*, covered with lovely blossoms. Just above we reached a narrow ridge, along which we walked, examining the small tufts and cushions of plants as well as we could with a cold wind stinging our eyes. No one really complained of the wind, since we were in rattlesnake country, and very happy that the cold was keeping those serpents indoors. Besides, we had brilliant sunshine, so the weather was practically made to order.

From here the view was delightful, a pastoral scene rather than alpine. Below lay a valley rimmed by low mountains, and sheltering several ranches with their patchy patterns of green and gold. At our feet we found many charm-



ing plants, the dainty little *Viola trinervata* with its bicolored flowers, *Eriogonum thymoides* ready to open its bright blossoms, and *Penstemon Gairdneri*. There were a few patches of *Phlox lanceolata*, and more specimens of Parrya, though none as lovely as the first encountered.

Little yellow stars appeared in places, some of them a tiny annual, *Crocidium multicoele*, others an Erigeron, probably *E. peucephyllus*. The silvery foliaged lupines were most attractive at this altitude, making compact, precise little mats, quite unlike the straggly growth they assume in our gardens.

Pangs of hunger had been telling us it was time to return to the cars, where we had left our lunches, so down we went in a very short time. We moved on several miles, and pulled up inside a field, where we enjoyed our meal despite the wind and a semicircle of cattle, who came from far off to watch.

After lunch we started across a field with a definite destination and purpose, but a queer thing had happened while we ate. We had been intrigued by occasional agate hunters walking along with their eyes to the ground. Knowing that fine specimens of blue agate were to be found in this vicinity, we succumbed, and temporarily became "rock hounds." After an hour of this, our pockets bulging with what were probably inferior specimens, we decided to start home, making an occasional stop. The road wound down off the plateau past patches of pale blue Brodiaea. Out on the main highway we headed west, and stopped shortly after passing Cle Elum.

We parked the cars and entered a small grove of trees, where the lovely blue of *Anemone oregana* was glowing in the shade. Beyond the trees, at the foot of a steep gravel slope, were found *Fritillaria lanceolata*, *Penstemon confertus* and *Paeonia Brownii*. In the gravel of the slope grew several plants of *Viola Sheltonii*, so interesting with its lacy grayish leaves. Too tired to climb the slope, we ended our day's exploring and set off for home.

## REPORT OF THE NORTHWESTERN UNIT

Members of the Northwestern Unit gathered in late afternoon on May 8th at the home of Mr. and Mrs. Page Ballard, to visit the gardens of Pine Lake members. The garden of Mrs. Albert Ficker was first on the itinerary. Trails winding among tall evergreens led through a profusion of rare and beautiful woodland plants. Next we toured the garden of Mrs. H. H. Miller, where there was an extensive collection of alpine and woodland plants, including many native Iris and Penstemon. After this we returned to the Ballards', where we explored the woods in which they are starting a garden, and followed the trail to where a brook flows through a beautiful ravine, overhung with maidenhair ferns and huge maples covered with licorice-root fern.

After a picnic supper and short business session, the meeting was turned over to the program chairman, Mrs. Ballard, who introduced the speakers and topics for the evening as follows: Mrs. Conner Gray, Androsace; Mr. A. M. Sutton, Dryas; Dr. C. Leo Hitchcock, Draba. A great number of specimens were shown to illustrate the discussions.

Two other very interesting displays were Mrs. Gray's blossoming specimen of *Erinacea pungens*, and Mr. Carl S. English Jr.'s specimen of the very rare *Synthyris platycarpa*, one of two species having a split corolla and also unusual because of its evergreen leaves. Professor Gale discovered this plant on Cool Water Mountain in Idaho.

The meeting of June 12th was preceded by a visit to the lovely woodland garden of Mrs. Else M. Frye, which she has described for us in the March-



April Bulletin of this year. It is even more beautiful than she describes it, and we especially enjoyed her outstanding collection of ferns. From there we went on to the gardens and home of Dr. and Mrs. Gray. Mrs. Gray's garden is another spot of beauty, with a great number of interesting alpine plants. After the business meeting a discussion of ground covers made up the program, and then Dr. Hitchcock distributed among the members a number of *Iris innominata* and golden-back ferns, collected on a trip to Oregon.

On July 1st a special meeting was held at the Clubrooms of the University of Washington Arboretum, for the appearance of Mr. Ralph Bennett of Arlington, Va., president of the American Penstemon Society. To this the public was invited. Mr. Bennett described the distribution and group divisions of Penstemon, and told of propagation methods, showing slides which he has collected throughout the United States, Canada and Mexico. He discussed also native plants of his own part of the country, showing more slides, including those of his own garden.

Our annual picnic, on July 10th, took the place of a regular meeting. We gathered at the home of Mr. and Mrs. Brian Mulligan at Juanita, where the garden offered a wealth of interesting material, although it is fairly new. We enjoyed a sumptuous picnic, after which came an unexpected treat in the form of a display of wildflower photography. Our chairman, Dr. Hitchcock, brought a set of prints recently purchased by the University of Washington Botany Department. It consisted of a series of eight-by-ten-inch black-and-white plant portraits, done with exquisite artistry by Mr. Detjen. Most of the wildflowers of the olympic and Cascade Mountains are shown in their natural size. This unusual set of pictures may be seen also in the John Preore Library in Chicago.

Helen Morris  
Corresponding Secretary

## MEETING OF THE NEW ENGLAND ROUND ROBIN GROUP

HELEN C. SCORGIE, HARVARD, MASS.

FOR THE FIRST of a series of summer get-together meetings, the New England Round Robin Group is indebted to Edward Knotts Jr. for a pleasurable visit to his rock garden and his bird and wildflower sanctuary, in southern New Hampshire at Rindge, in the beautiful Monadnock region. Here on the 15th of June we gathered from four states, though not in full numbers, as the Maine contingent was unable to come, and several others were also missing. From Vermont came Alice Baylor, Dorothy Stillwell and James Mitchell. New Hampshire was represented by our host, and Connecticut by Grace Campbell. Massachusetts contributed Mary Granger, Helen Scorgie and Dick Darling.

Inspection of the rock garden was the first order of the day. This enchanting haven for many rare and unusual alpinines was built in the form of a mountain peak, with the illusion heightened by the use of occasional pigmy trees. Although the garden was but five years old, already many of the diminutive plants were traveling out of their homes in the rock crevices, across the small stones that formed a mulch everywhere. Dominating the lovely picture were two flourishing clumps of *Onosma stellulatum* var. *tauricum* that flowed down from the heights in butter-gold masses, contrasting with the delicate beauty of the smaller plants and enhancing their charm.

Exploring along the paths and byways brought to view many small treasures. One of these we found deep in a miniature north-facing cave—*Ramonda pyrenaica*, brightening the dark space with its amethyst blooms poised above the



rosette of crinkled leaves. It was most happy in its garden home, for it had bloomed there three years.

Later, after a box picnic on the lawn, while future plans were mulled over, we had our first exchange of plants, and visited the sanctuary some distance away. Here in a stretch of mixed woodland, broad paths bent among the trees, beneath which wide reaches of flowers were blooming profusely in the deep humus. Many birds have their homes in this quiet spot, but on that warm afternoon, only the Canadian warbler was chanting his clear song.



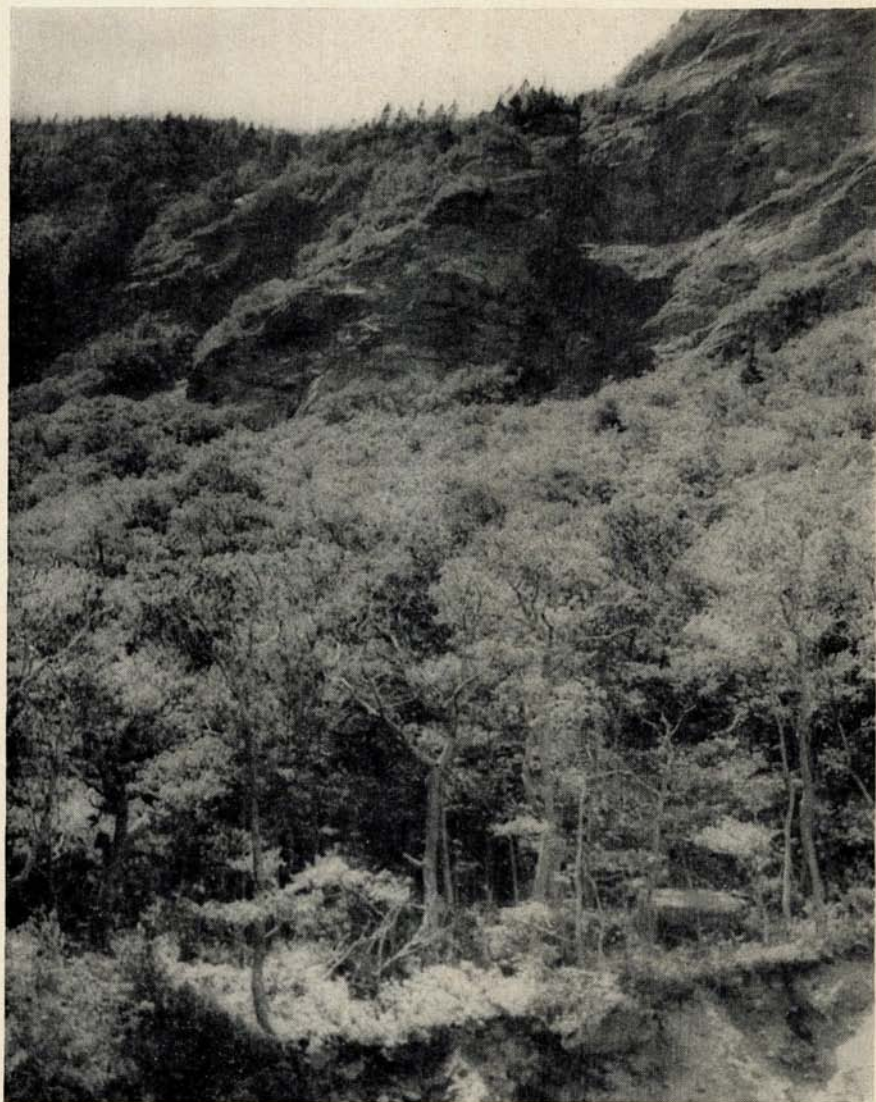
*Ramonda pyrenaica*, the classic rock garden plant, which usually requires overhung, north-facing crevices, or other special treatment.

## COLLECTING TRIP TO SMUGGLERS NOTCH, VT.

GRACE F. BABB, PORTLAND, MAINE

MEMBERS of the New England Round Robin held their second get-together on July 13th, at Smugglers Notch, Vermont, at the invitation of Mr. James Mitchell, well-known retired nurseryman. When he offered to lead the group on a collecting expedition to the foot of the cliffs on Mt. Mansfield, the idea was greeted with great enthusiasm. It is surprising and interesting to know that every one of the 15 round robin members is well-versed in native plant material, and many choice wild flowers are growing in these members' gardens.

A group of 19 assorted members and guests met at the parking place in the Notch, almost directly under the cliffs. These were Mr. Mitchell, Dr. Helen Scorgie (director of the robin), Mary and Dwight Granger, Dorothy and Harold Stillwell and daughter Judy, Angie and Alfred Pease, Anne Russell, Alice Baylor and daughter Dorothy Hills, Grace Butcher, Grace Babb and son Bruce, Steve Hamblin of Lexington Botanic Gardens, Harold Rugg of Dartmouth College, Dick Darling and Ted Knotts.



Smugglers Notch, a botanist's paradise

While old and new friends were meeting before the climb, a very worthwhile plant exchange took place. It was noted that several members brought individual plants carefully packed and labelled in plant bands, small ice cream cartons, cans, or other packages, which were very easy to handle and distribute. Dr. Scorgie also provided a large carton of fresh sphagnum moss which was very helpful in packing loose plants.

When the party was ready, Mr. Mitchell led the way, at first up a steep rocky trail, but soon branching off through rough brush up the mountain side.



Mr. Mitchell himself, veteran of the party at 77 years, and the two youngest, Judy and Bruce at 11 and 13 years, climbed around like expert mountain goats, but some of the rest of us made harder work of it, especially when it was the first such trip. Botanists of the group pointed out such unusual plants as the lovely *Oxalis montana*, American form of the more familiar European *O. acetosella*, still in bloom in spots; the huge summer foliage mats of the yellow *Viola rotundifolia*; and clumps of the handsome and rather rare Braun's Holly Fern (*Polystichum Braunii* var. *Purshii*), very distinctive with its shining evergreen fronds dusted with brownish hairs. This is closely related to the familiar Christmas fern which was also present. Other ferns noted in the woods and on the cliffs included the graceful maidenhair, rock polypody, fragile and bulb-let bladder ferns, smooth and rusty Woodsias, the delicate oak fern, and the rare green spleenwort. Two Lycopodiums were found,—*L. lucidulum* and *L. Selago*.

Among the other woodland plants noticed were red columbine, meadow-rue, sweet cicely, foamflower and mitrewort, wild ginger, goldthread, wild liquorice, enchanters nightshade, toothwort, wintergreen, wild leek, early saxifrage, largeleaved goldenrod, red and white baneberries both in fruit, Clintonia and red Trillium also with berries, Canada violets still in bloom, and others such as smooth yellow and Selkirk's.

Shrubs included wild rose, bush honeysuckle and flowering raspberry all in bloom, red-berried elder, hobblebush and a cornel in fruit, and mountain alder.

About the time most of us were wondering if we'd ever make that "last long mile," we suddenly emerged from the woods to a wilderness of huge boulders, and a steep rock wash surrounded by the almost perpendicular cliffs. This was our goal, and the alpine we hunted were everywhere, clinging to the wet ledges dripping with spring water, and snuggled in dark crevices. Our first glance backward was a shock to see the winding road almost directly beneath us, but some 900 feet below, but after we regained our breath, we were thrilled with the indescribable beauty of the wide Vermont valley stretching away to the northeast, completely ringed with purple mountains. Another towering cliff stood directly across the Notch road from us, with an outcropping called the Elephant Head.

We all stopped long enough to eat a hasty lunch while the younger members collected cool water from the rocks for our thirst. After that, everyone scrambled around to their heart's content, collecting such treasures as were accessible and seemed most likely to grow in our lowland gardens.

Most thrilling were the three alpine saxifrages, often growing together along a single ledge. The large encrusted rosettes of *Saxifraga aizoon* are easiest to grow in cultivation, with shade and lime, but the other two are more fussy,—*S. aizoides* with light green leafy clumps, many in bud or full bloom of bright yellow flowers,—and *S. oppositifolia*, one of the loveliest of the clan with tiniest dark green rosettes, looking like a prostrate creeping moss at first glance, and fascinating under a microscope. Almost as popular was pretty little *Erigeron hyssopifolius* in grassy-leaved tufts of a few inches, and white or pale lilac flowers. Sprays of *Astragalus Blakei* in pale lavender sprawled here and there, and on the shady side of the cliffs among low shrubs were a few plants of the rare *Castilleja pallida septentrionalis* with pale cream-colored heads. Silky silver-green clumps of *Artemisia canadensis* with 6-8 inch stems of yellowish buds, and dark gray-green rosettes of *Draba arabisans* made interesting contrast with the bright green rosettes of a dwarf Solidago. (Mr. Mitchell reported that the *Erigeron* and *Draba* often make fine compact plants in the garden, better than in the wild.) Airy stems of bluebells and red columbine waved from every cool



crevice, and also mingled with the high alpines were clumps of *Houstonia*, gay and dainty as in its usual lowland meadows, and wild strawberries hiding their fruits in a low hollow protected by shrubs. A few plants of the rare *Hedysarum boreale*, related to the *Astragalus*, and the little annual *Gentiana Amarella* were also found, while the tireless climbers who reached the very foot of the cliffs found *Pinguicula vulgaris* near the mouth of a dark tunnel in damp clay soil. Everywhere on the steepest slopes were dwarfed clumps of *Potentilla fruticosa*, "with inch and a half golden blooms lighting up those sullen gray ledges from June to October," as Mr. Mitchell had promised.

The greatest single hazard of the trip was from dislodged rocks which were apt to slide suddenly and without warning to "bop" the unsuspecting climber next below, but nothing more serious happened than a few purple and yellow bruises (and I speak from experience!). The descent seemed quicker and easier than the ascent, contrary to our expectations, and in a comparatively short time, the party slid and scrambled back down to the parking place, where plants were sorted and packed for the trip home.

The Maine group of members made a long one-day trip although most others stayed one or two nights at nearby tourist cabins. All of us were enthusiastic about the beautiful Vermont landscape along our route, and found it distinctly different from that of Maine and New Hampshire. We enjoyed the wildflowers everywhere along the roads,—Canada lilies, bright fireweed and lavender-pink mallows, bladder campion, sweet clovers and blue vetch, chicory looking even more blue than at home,—and loveliest of all, the wet meadows and brooksides patched with sky-blue forgetmenots.

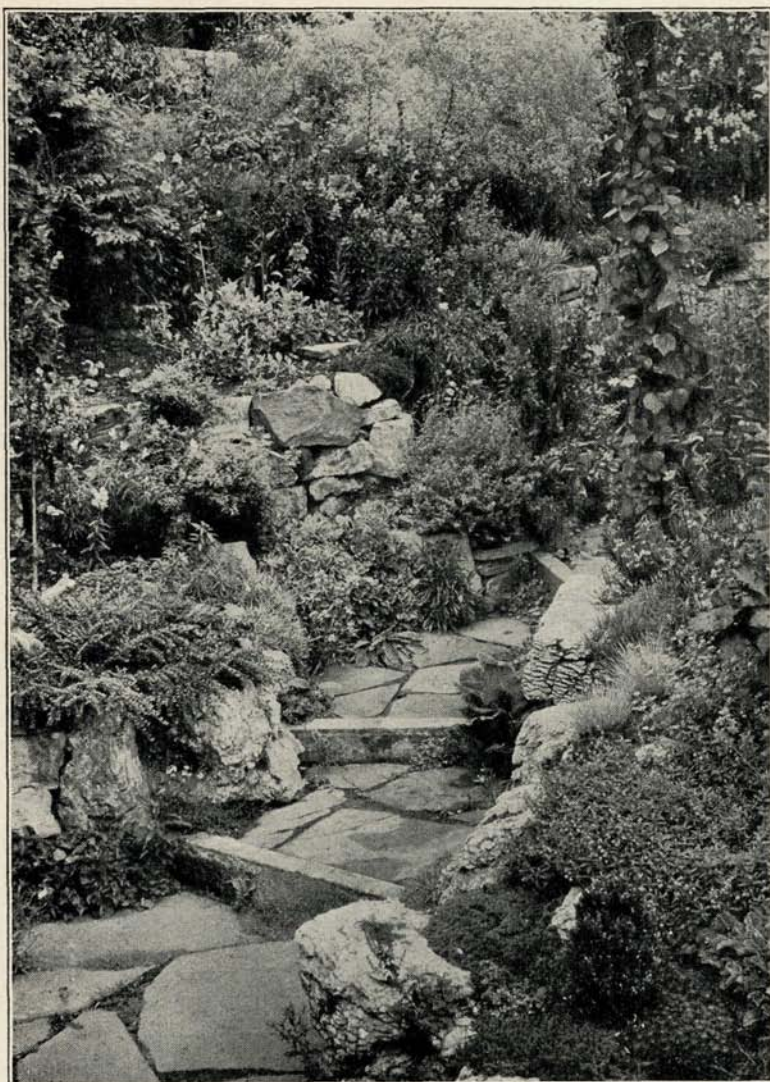
## FAVORITE CORNERS

Our suggestion that members send in photographs of their rock gardens brought one excellent response, from Leonard J. Buck, which was printed in the July issue, and thus far no others. Rock gardens we may think of as having exceptional permanence. Actually they are never two days the same. Even if the rocks remain exactly where they were placed, the plants grow and develop, age and die and must be replaced, flower and fade and are never quite the same next season.

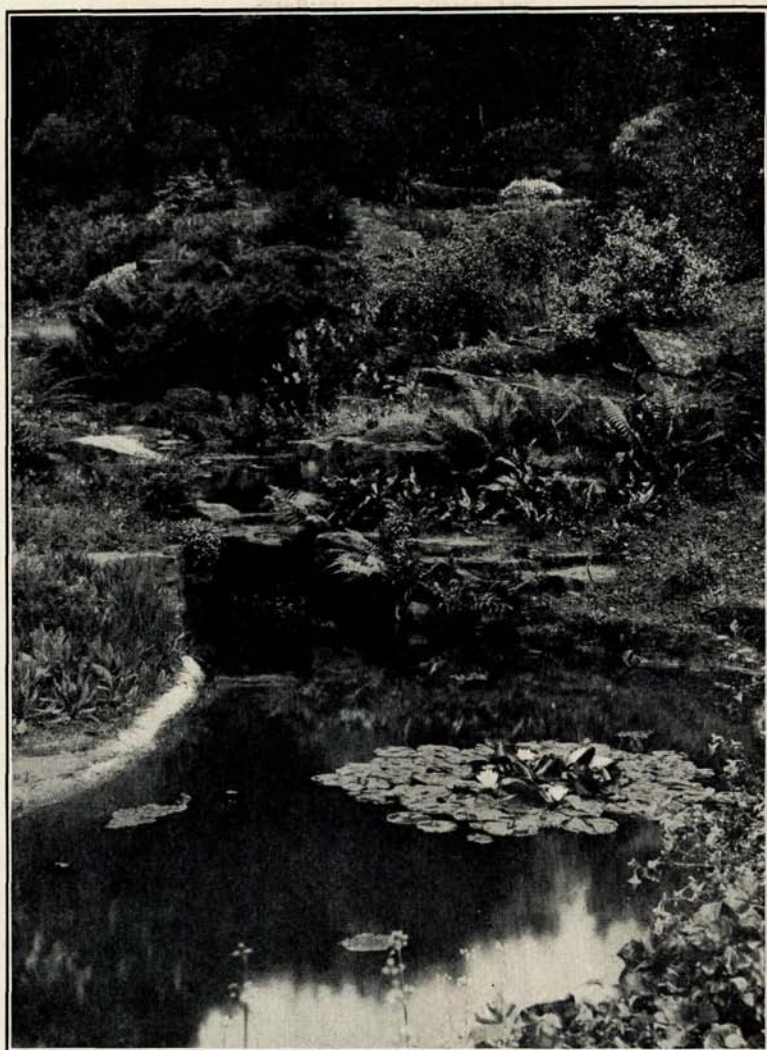
On some fine day when you have brought the most picturesque part of your rock garden to an unusual state of perfection, stop and consider that it will never again look precisely like that. Now is the time to preserve what you have accomplished by taking a photograph of it, one in color of course, but a black-and-white too, because after a few years the colors fade and you have nothing. And once the photograph is taken, let others see it. Send it to the *Bulletin* with a list of the principal plants shown in it, and when it is published it will last as long as there are libraries, long after the weeds and invading tree-roots have won a partial victory over your tired back.

Photography is an art too. Unless you are a past master of it, take a number of shots from various angles and in different lights, so that you will not miss the best view. Then have a glossy print made from the best negative, or send the negative to us, and we will have the print made. The following are a few suggestive examples from Cronamere, the garden of our late founding member, Mrs. Florens H. DeBevoise, through the kindness of whose heirs we are permitted to use these illustrations.





Rising steps display the rock garden to advantage because by their very nature they suggest height and climbing. Also the corners create shadows which in a picture are needed for contrast to the lights. The plants stand isolated on different levels, and thus show individually. Steps take a different pattern of light and shadow every hour of the day, and should be studied to discover the most favorable angle of sunlight.



A less successful photograph because there is less contrast of light and shadow. The eye does not easily separate a wide expanse of plants unless shown in their characteristic colors. Therefore it is best in black and white not to try for too wide an expanse unless the parts are dramatically divided from each other by areas of sun and shadow.

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Further particulars regarding the Alpine Garden Society may be obtained from the Secretary, C. B. Saunders, Husseys, Green Street Green, Farnborough, Kent or, better, from Mr. C. R. Worth, Groton, New York, who is one of the Society's Assistant Hon. Secretaries (foreign).

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