BULLETIN

of the

AMERICAN ROCK GARDEN SOCIETY

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|--|-------|
| | |
| APOLOGIA PRO ERICA MEA — Dorothy Metheny | . 1 |
| MEMORABLE DAY IN JULY — Sallie D. Allen | . 7 |
| A TOUCH OF OPTIMISM — William J. R. Adamsen | . 9 |
| A ROCK GARDEN SHRINE | . 11 |
| A PLANT PROPAGATING PROJECT — John P. Osborne | . 13 |
| OUR WINTER GARDEN — Doretta Klaber | . 14 |
| BOOK REVIEWS | . 14 |
| A FEW CAMPANULAS — Robert M. Senior | . 16 |
| FOLLOW-UP ON IRISES OF THE PACIFIC COAST | . 18 |
| NOTES FROM THE NORTHWEST — Sallie D. Allen | . 19 |
| WELCOME! NEW MEMBERS | . 24 |
| NOTES FROM H. L. F | . 25 |
| EDGAR L. TOTTEN | . 26 |
| INTERCHANGE | . 27 |
| A WELCOME "IMPOSTOR" CELEBRATES | |
| INDEPENDENCE DAY — Edgar T. Wherry | |
| I PROTEST — Robert E. Stuart | |
| I WAS IRRITATED — Madalene Modic | |
| OMNIUM-GATHERUM | |
| HOW SHALL WE SAY "DODECATHEON"? — Claude A. Barr | |
| TREASURER'S REPORT — Alex D. Reid | 34 |

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BULLETIN

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Albert M. Sutton, Editor

Vol. 23

January, 1965

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APOLOGIA PRO ERICA MEA

DOROTHY METHENY, Seattle, Washington

To stand forth in the American Rock Garden Society and admit to being an enthusiastic and undiscriminating heather grower is an act requiring a sort of devil-may-care heedlessness of possible consequences, or paleolithic ignorance of gardening desiderata. I'm not sure which of the above applies in my case—possibly both; but the fact remains, and here I stand.

"But they're so easy to grow," objects your rock garden purist. "Praise Deus!" murmur I. (Perhaps it should now be revised to "Praise the twelve

dei!")

Our point of reference is a very well-drained sandy hillside facing west to Puget Sound, from whose high tides it is about 200 yards back and 200 feet up. The slope of our property averages one foot up to three back, but after years of struggling to grow various plants on much sharper grades, we terraced and bulk-headed to provide workable moisture retention. It was at this point that the heather gardening commenced in fair earnest. Our sharp land drainage is the one absolute soil requisite for all heathers and our sunny hillside suits all, though several will do well in part shade. All enjoy our acidity, though a few will stand a certain amount of liminess. In any case, the good air drainage and proximity to the salt water gives us winters probably somewhat milder than is enjoyed by many other Seattle gardeners, especially those much further away from the Sound and at considerably higher elevations. On the other hand, our summers are cooler, too, and I notice that many of our summer flowering shrubs lag behind those further inland. In dry weather our plantings are given a one-hour soaking once a week.

As the confusion of uses of the words "Heath" and "Heather" is all but irreducible, it seems best to just stay with the Latin generic names. Erica was Linnaeus's generic term for the plants now included in Daboecia, Calluna, and Erica, and I also add as "Heather" Bruckenthalia spiculifolia, which Salisbury

included in the genus Erica when he described it around 1800.

Dr. R. H. Compton, writing of the Cape heaths (*Erica* sp.) in the *Journal* of the *Botanical Society of South Africa*, June, 1925, described them in lyric prose. "The shape of the individual flower is very varied, but it always has a curiously neat appearance. The short-tubed species in particular suggest the ceramic art at its best, and many of them might have served as models for the amphorae of Greece. In all there is a singular simplicity and purity of line, and the various parts are arranged, as it were, with most meticulous exactitude. Every detail is exquisite; there is no exuberance, no floridity. Here is none of the

Suleimanic glory of the lily, none of the bizarreté of the orchid, but rather the expression of the perfect beauty of geometry and craftsmanship. The heaths do not intoxicate the floral voluptuary: they have no wild extravagance of color, few of them have perfume, and their form is of the simplest; it is to the cool, critical vision and the well-ordered mind that they appeal." Etc., etc. Have you taken a

close look at any heathers recently?

As for the *Daboecia* floret, it is Japanese lantern-shaped, about one centimeter long and three-fourths as wide,—large enough to be individually showy. The corollas of the *Calluna* are much smaller, deeply 4-lobed and all but hidden by the longer, colored sepals, and their floral effect is produced by their massing in racemes from one to twelve inches long. The terminal spike inflorescence of *Bruckenthalia* is littlest and daintiest of all, not over 2 cm. long, its tiny corollas, deeply 4-lobed and bright pink, rising on clear rose pedicels from bright red stems. Its welcome flowers put in their appearance, even in this woefully delayed season, by the first of June, generally a period of relative lull in gardens, with the early flowering trees and most of the rhododendrons past their prime.

Daboecia flowers are deciduous, dropping from their stems as they are spent and thus maintaining the plant's fresh appearance for the duration of the season. The indeterminate character of their erect terminal racemes lets them keep on opening new bright flowers at their tips, leaving the spent remains of former glory to their more or less back seats on the stems below. Callunas and most of the hardy summer-flowering ericas also have indeterminate inflorescences and so keep their best flower color uppermost in view for the duration of their seasons. Calluna, Erica and Bruckenthalia all belong to the persistent-flowered group of Ericaceae, holding their spent bells in a pleasing variety of shades of brown to warm the winter landscape till they are removed by the annual spring shearing.

The evergreen foliage of heathers keeps them always presentable, and with the callunas particular interest is provided by the great variation of color forms and the degree of imbrication of the tiny leaves, as well as the general compactness of the plants. The handsome, small (to 12 mm.), ovate leaves of *Daboecia* are much less finely textured than those of the other three genera. *Erica ciliaris* has 3 mm. long ovate leaves and *E. tetralix* leaves are similar but narrower. The rest of the hardy *Erica* species and *Bruckenthalia* have linear leaves in a variety

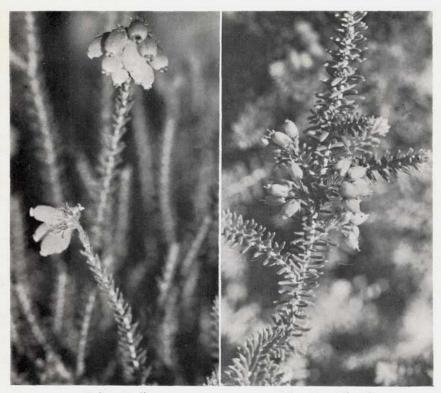
of sizes and arrangements.

Our selections for the rock garden are made from two species of Daboecia, (D. cantabrica, with a few varieties, and D. azorica); Calluna vulgaris, a single species with an infinity of varietal forms; Bruckenthalia spiculifolia, determinedly unvaried; and, fortunately simplifying our problem by eliminating the 500 or so tender South African Cape heaths, eleven more or less hardy Erica species, with several dozen varieties, plus their interspecific hybrids. Also eliminating, I might add, a great array with which I have had no experience. Further grandly dispensed with in this consideration are all the numerous heathers that are admittedly best displayed in extensive massed groupings, or are so large and bulky as to be out of scale for what would seem usual rock garden use, or are over one foot high.

Roman numerals indicate Rehder's hardiness ratings.

Bruckenthalia spiculifolia (V) is a neat little plant with closely stacked erect stems not over eight inches high. It does best in peat and leaf mould, but will stand some lime. It can be propagated by seed, cutting, and division; flowering period June, July, and early August.

Calluna vulgaris (IV) is as hardy as would be necessary for a species whose zone of distribution centers around the North Sea and extends up across Scandinavia, where it will survive severe winters when blanketed with snow. However, it has also traveled south to the shores of the Mediterranean, and some varieties



Erica tetralix

Erica × williamsii
David Metheny

which have originated on the southern fringe of its range will not stand so much cold. W. Beijerinck, in his monograph on *Calluna*, published in 1940, describes 87 varietal forms and subforms, sold under about 100 names, and many more names have undoubtedly been added since. Several dozen will be found in the lists of heather nurseries, but only a few are really worth considering for the rock garden.

In the above twelve-inch high category (always remembering the annual March shearing) are the old favorite pincushions, C. v. 'Camla', and 'County Wicklow', with double pink flowers; 'crispa', a neat plant with erect stems and white flowers; 'Else Frye', with wavily erect stems and double white flowers; 'Mrs. Pat', unique for its rose-pink foliage at the stem ends. Dwarfer still are the following: 'Dainty Bess', a prostrate slow grower with blue-green, woolly-looking foliage and pinkish-lavender flowers.

'Foxii nana', a four-inch pincushion with its little stems so tightly compact as to present an all but solid rounded surface, with flowers purple, but very scarce and close to the surface of the ball.

'Foxii floribunda', a less compact and more spreading form with many more flowers on stems that may reach to six inches. They are pinkish-lavender.

'J. H. Hamilton', A.M., an eight-inch high cushion, unique for its beautiful double coral-pink flowers, a quite unusual shade among heathers. An old, neglected, unsheared plant will not grow much higher, as its twiggy branches will do most of their extending horizontally.

'Kuphaldtii', a fine-textured, purple-flowered, quite decumbent form, possibly mounding to six inches at its center. This is an individualist with its slender stems tending to curve either horizontally or downward, giving it an every-which-way-except-upward appearance.

'Mrs. Ronald Gray', a prostrate, mat-forming, decoratively-patterned plant, with red-purple flowers and stems that root down rather easily as they creep, the mass of the plant to about two inches above ground, and, in a shady situation, with

stem tips rising to about five inches.

'Nana', a light green, erect-stemmed, purple-flowered little plant, which will gradually spread out to take in more territory, but not reach up more than six inches.

'Nana compacta', similar but with the stems more closely stacked together and about eight inches high. (This does not tally with Fred Chapple's description, and it is hard to say whether the difference is in the plant, the label, or the growing conditions). Flowers numerous, tiny, pinkish. (Fred Chapple is the author of The Heather Garden and president of the new Heather Society).

'Pygmaea', another similar six-incher, but, in mine at least, the stems have a rather laxer habit. A few purple flowers.

'Rigida', a white-flowered variety with stiffly horizontal branches, may grow eight inches high.

'Ruth Sparkes', a low, compact, rounded plant to six inches high, with bright yellow foliage and double white flowers.

'Sister Anne', one of the stand-outs. It is compressed, decumbent, four inches at the highest, with soft, furry-looking, gray-green foliage (darkening in winter), its pinkish-lavender flowering stem tips delicately arching over, mostly horizontally in short arcs, and occasionally one of the creeping stems sends down roots as it goes.

'Tom Thumb' and 'The Molecule', two small perfectionists masquerading as slow-spreading conifer groves in miniature. 'Tom Thumb' is a fresh light green, densely grown to four inches, with pink flowers; 'The Molecule' has more slender-spired "trees", about an inch higher, more somber green and with darker shadows in its depths.

'Tomentosa', an open plant with tightly imbricated gray-green leaves on gently ascending stems to nine inches and with purple flowers lavishly displayed on rela-

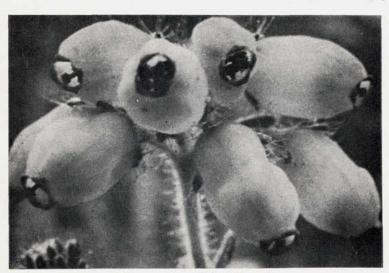
tively long spikes.

Calluna will grow in any well-drained acid soil and is a natural cover on heaths too infertile to nourish many other plants, and if given a choice, its roots will do their spreading in moist peat. A good mulch of peat all around the plants looks well and gives an extra bonus of rooted layers on the perimeters. They should have, at least, half sun, though 'Mrs. Ronald Gray' succeeds as a ground cover under deciduous azaleas. They can be propagated by cuttings and layering. Also I have noticed that the compact varieties have a tendency to grow numerous slender rootlets from their above-ground stems in the dark spaces below the foliage—a sort of self air-layering, and if cut and put in the ground during the early spring rains they will take off without batting an eye. The foot-high plants should be cut back to just below the old spent flowers in March; but the conifer grove-shaped ones are best left alone, and the horizontal growing plants don't offer much to shear.

Daboecia cantabrica var. praegerae (V). Its gently ascending branches to about twelve inches are thickly furnished with light green foliage and its shocking pink bells are a delight from July till fall. If a plant becomes leggy the cure is to cut it right back to virtually nothing in March, following which it will shortly

be back and in handsome shape. This indicates the advisability of rather hard annual shearing. D. azorica would be a true treasure in the rock garden if only a little more hardy. It has survived a certain amount of freezing (about 15 degrees F.) but would not really thrive in a garden twenty miles further inland and 500 feet higher than ours. The British writers describe it variously as from six inches to one foot high. My plant's branches reach no more than two inches above ground, and the racemes of brilliant red flowers rise another two inches for their mid-May to mid-June month of glory. Where it thrives, it will gradually spread out to make a finer display each year. The daboecias need full sun and peat and can be increased by cutting and layering.

Eliminating the taller growing *Erica* species leaves us with a good number to choose from. The following are members of the winter-spring flowering species:



Erica tetralix umbel (Enlarged)

David Metheny

Erica carnea (V) and its varieties keep color in our Puget Sound gardens from November right through to May, and will probably open their bells in March in colder climates. The flowers maintain their fresh, though, with some, deepening color for all the months of their blossoming and then suddenly brown off when the new tip growth starts and conceals them in late spring. The type form, with rosy pink flowers, has been in my garden for fifteen years and has never grown taller than eight inches. Other varieties of that height are E. c. 'Aurea', with vivid rose-pink flowers and yellow leaves at the branch tips; E. c. 'Carnea', with lighter pink flowers and bright green foliage; E. c. 'Sherwoodii', clear light pink. E. c. 'Vivellii' grows up to twelve inches, but is desirable for its striking combination of bronze foliage and intense carmine flowers. My E. c. 'Ruby Glow', with ruby red flowers, is about thirty inches in diameter and six inches high. E. c. 'Cecilia M. Beale', has white flowers. My young plant is one foot across and three inches high, and it does not appear likely to reach much higher. The Carnea species should be sheared back no later than the end of April or early May, as they start early in the summer to set their flower buds for the coming winter.

Erica × darleyensis is large and dull lavender-flowered, but its varieties alba (white) and 'George Rendall' (bright pink) are good-looking plants within the one-foot high limit, hardy and with long winter-spring flowering seasons.

My plant labeled *Erica mediterranea* (VI?) 'Silberschmelze' (Silver Beads) seems to answer the description, with silvery white flowers, and not over ten inches high. It flowers from November till April (much earlier than the supposed *E. mediterranea* season), and lacks the typical *E. mediterranea* central heavy stem, and seems to me to more resemble *E. carnea* than *E. mediterranea*. However, whatever its proper name, it fits our low-growing requirement.

The following *Erica* species are all summer flowering:

Most of the *E. cinerea* (V) varieties fit within the one-foot limit; some are dwarfer and particularly to be recommended. *E. c. 'atrosanguinea'*, like the other varieties of *E. cinerea*, has flowers of so glowing a color as to resemble neon signs, and a longer season than most, as it is brilliant red from June to October. Other red, purple, violet, rose, and white forms are attractive, but probably the most desired is the one that flowers virtually not at all—*E. c.* 'Goldendrop'—a little honey about five inches high which is golden yellow in summer and turns to a deep mahogany red in winter. *E. c.* 'Goldenhue' is taller, not as reliable for red color in the winter and rather weird-looking in summer with its lemon-yellow-green foliage and a good many bright purple bells, making almost too strong a contrast. In loam, these plants will grow tall and not flower much; but on a starvation diet of solid peat over infertile sand they will remain low, spread slowly, and flower their heads off. Propagate by layering, cutting, or careful division.

Erica tetralix (III) is notably hardy and another low growing species with ascending stems quite closely packed, and usually rather bluish-green foliage. The type and many of its varieties are pinkish-flowered, the terminal umbels coming and browning off through a long summer season. There are three color forms worth particular notice. E. t. 'Darleyensis' has bells of an unusual and charming shade of deep salmon-pink over gray-green leaves. E. t. 'Alba mollis', with more erect stems than the rest, is a beautiful foliage plant, the tiny marginal hairs giving a frosted effect to its blue-green leaves; but if you are one who can't stand to see the sparkling white umbels turn pinkish and then brown off to mar the pristine beauty, you may not want it. By the same token, E. t. 'Con Underwood' has such dark red flowers that the browned umbels are not particularly noticeable among the fresh. My plants do well in sandy loam and peat. Propagate by cuttings or division.

There are a number of E. $tetrelix \times E$. ciliaris hybrids that are low-growing and attractive with pink flowers. Of these, $E \times mackaii$ 'Watsonii' is a very handsome plant with clear pink bells over a long season—July through October. $E \times$ 'Dawn', presumably derives its name from the lovely dawn-colored foliage at the branch tips in spring; its pink flowers are generously offered, June to October. An unusual hybrid is $E \times milliamsii$ ($E \times milliamsii \times E \times milliamsi \times E \times milliamsi$

For the benefit of those who may be able to give it the required mild climate, and because it is such a lovely species, I mention *Erica umbellata*, A.M., even though Mr. Fred Chapple says it will not tolerate lower than 17 degrees F. In Seattle, it has survived slightly more freezing, though damaged. It is a rounded-up plant about one foot high and somewhat broader, with dark green, small, linear leaves and lovely globular, rose-red flowers, generously presented in umbels of six or less. Its flowering season is said to be April-May, but in Seattle, mid-June to August is its period of color. It is one of the rare ericaceous lime lovers, so use no peat, and provide excellent drainage. Propagate by cutting.

E. vagans (V) 'Nana' is, as far as I know, the only member of this species

not too elephantine to meet our specifications. A slow-growing, linear-leaved, low mound to one foot, it has creamy-white flowers in August-September. Propagate by layering or cutting. For *E. vagans*, the poorer the soil the better, and shear well in March.

In our garden, self-sown seedlings appear rarely of Bruckenthalia, Daboecia cantabrica, Erica cinerea, or E. × darleyensis. E. vagans self-sows generously, but not many, with all the cross-fertilization here, turn out to be desirable forms. Calluna seedlings are myriad; and we should probably conclude with a word of warning about ruthlessly forking them out the minute they appear. But, if you allow them to develop for a season, so that they have time to indicate their eventual character,—erect, ascending, horizontal; gray-green, blue, yellow, red; compact, diffuse—you'll be caught; and your garden, also, will have that unweeded look. Then it takes heroic restraint to refrain from naming the attractive ones and adding them to that all but endless list of horticultural varieties. But it's such fun!

MEMORABLE DAY IN JULY

SALLIE D. ALLEN, Seattle, Washington

It was a warm, sunny morning in July when fifteen of us met on a little-traveled Forest Service road leading to the summit of Oregon Mountain, situated near the California border, southwest of Grants Pass, Oregon. A number of plant hunting excursions, such as the one I describe below, had been carefully planned and arranged by Mr. Boyd Kline of Medford, Oregon, for Mr. H. Lincoln Foster, our new ARGS president, and Mrs. Foster. An unexpected pleasure came in learning that Mr. and Mrs. Harold Epstein would accompany the Fosters on their western adventures. The group also included Mr. and Mrs. A. K. Free, and Mr. and Mrs. Albert M. Sutton and daughter, Sherry, all of Seattle, and Mrs. Dorothy Marshall from Portland, and my daughter, Susan, and myself. The day's field trip was under the leadership of Mr. Marcel Le Piniec, of Ashland, Oregon, ably assisted by Mr. Lawrence Crocker, of Medford. Our one regret was that Boyd Kline could not join us on this little trip because of illness in his family.

Although many of us had not met before this summer, formalities foreign to the friendly atmosphere were dropped almost at once and first names came easily as if we had known one another many years. Rewarding friendships were established as we explored together the fascinating flora, sharing the joy of discovery, helping one another to find and dig a desired plant of reasonable size to collect. Marcel and Larry seemed to make mental notes of plants we individually were interested in, either pointing out a good specimen, or digging it themselves from the hard, rocky ground. When a question would arise over identification, a book would appear from somewhere for the settlement of a technical detail. The good-natured discussions were enlightening, usually evolving into an informative debate over the horticultural aspects of the plant in question.

Our caravan of five cars stopped first in a gently wooded area where we colletced small specmens of Lithocarpus densiflora var. echinoides; through not a true oak, it resembles the shrubby species. It forms a rounded bush several feet in height, with small leaves an inch or so in length, and with a bluish color. Blue foliage was characteristic of many of the plants and shrubs growing in the heavy red soil. Two other plants collected were Dicentra oregana, considered very choice, and Viola lobata which would only have been recognized as a violet had it been in flower (yellow) or in fruit. We were delighted to find small plants of Quercus vaccinifolia, an extremely neat and desirable little shrubby

oak. A beautiful lily was admired by all of us, recorded by the photographers in our party, and left alone because the species has been collected to excess and is in danger of extinction in its native habitat.

As we progressed up Oregon Mountain we observed dry, open hillsides covered with mounds of the before-mentioned oaks, although sometimes we were surprised by a stand of Darlingtonia californica in what seemed incongruous surroundings. Upon inspection, however, we noted moisture seeping to the surface at these locations. At one point, where we crossed a creek, we did find Darlingtonia growing under conditions that one would expect—damp little sunny meadows, in the company of Cypripedium californicum (said to be fairly easy in cultivation), a small Sisyrinchium species, and meadow grasses. Along the creek, growing from between large rocks was the western azalea, Rhododendron occidentale, its beauty and fragrance equally intoxicating.

We drove several miles beyond the meadow, past shrubby hillsides, similar to those we had seen before, until we came to a point where there was seepage of water along the road cut. With Rhododendron occidentale, which we usually saw growing wherever there was water, we found a large white "Easter Lily", possibly Lilium washingtonianum; Ledum glandulosum var. columbianum, a desirable rhododendron-like shrub easily adapted to normal garden conditions; and what Marcel said was a dwarf myrtle, with the same aromatic leaf when crushed as Umbellularia californica.

We learned an interesting lesson observing Marcel collecting plants bare rooted, as is often necessary when trying to get such things as Mahonia pumila or Vancouveria chrysantha. Not only do these plants wander for considerable distance with no apparent beginning or end, but the heavy red soil is baked hard in summer. With him in his car, Marcel carried a quantity of wet moss and burlap. He dug a portion of the desired plant, attempting to obtain as many roots as possible. Immediately we wrapped it in the wet moss, then the burlap, as it is essential, he explained, not to expose the roots to sun, heat, or air for any longer than necessary. He also suggested that we select plants at the foot of a rock, where their roots are restricted, rather than in the open. At the same time he warned us to hit the shrubbery, often found overhanging the rocks, with a stick in event that a rattlesnake might be hidden there. We were also fortunate to be able to observe some of the 'tricks' of the plant-hunting trade from such a teacher as Marcel Le Piniec who has had so many year's experience in the study and collection of plant material. He has introduced a number of plants into cultivation. including his Le Piniec form of Kalmiopsis, which is proving such a delight in our gardens.

Again we found a change of flora in the spot selected to enjoy our lunch in the only real shade we had found so far. We sat on ground covered with Linnaea borealis, Gaultheria shallon, and seedling Rhododendron macrophyllum. Mature rhododendrons were in flower around us, an unusually good display for so late in the season. Close by bloomed a lovely white iris, thought to be a hybrid,

and Phlox adsurgens.

The return trip was interrupted by many stops to inspect, observe, discuss, and collect. Frequently during the morning we had seen wide, dense mats of *Ceanothus pumilus* covered with attractive, reddish fruit. Nice six- to eightinch clumps appeared to be easy to collect, however one can soon become discouraged. The small, evergreen leaves, one half inch long, densely clothe the stiff, unbending, rather thick branches which, in turn, are attached to a trunklike main root of considerable depth. Undaunted by my first unsuccessful attempt, I happily found several the size of a silver dollar, which had to be dug with a pick to a depth of at least eight inches. It was no easy task, for this, too, was

hard, rocky ground. The carpets of *Geanothus* often covered a yard or more of exposed surface such as banks beside the road where the close-growing branches reached down seemingly to soften the raw cuts man has created in building the road.

At the time I was absorbed with my Ceanothus, others in the group found a miniature rose, Rosa spithamea, endemic to the Siskiyou Mountains. Our attention was then drawn to Juniperus jackii, with its long finger branches reaching out across the inhospitable rock. On the Juniper was found an odd witches'-broom, those peculiarities of nature from which some of our most intriguing dwarf conifers originate. Curiously a number of witches'-brooms were found on various conifers within a very small area.

One can only absorb so much while exploring unfamiliar country and being introduced to a completely new and different flora. There were many more plants worthy of description including *Iris*, *Phlox*, *Brodiaea* and *Allium*, to name but a few genera, however my memory is sketchy as to correct species identification. I started the day trying to take notes, but the conversation was so lively, informative, and entertaining that I soon forgot about pencil and paper in favor of lis-

tening, talking, and digging.

The caravan made its last stop at our camp where we were located for a two-night stay on the first leg of our family vacation trip—destination, the Sierras and Yosemite. My husband and small son greeted us, saying they, too, had a successful day fishing and swimming in an enormous, deep pool they had discovered a quarter-mile down stream. With sincere thanks to Marcel Le Piniec and Larry Crocker, we bid a reluctant farewell to our congenial companions; the Suttons and the Frees to find a camp spot several miles beyond; the rest of the party to return to Medford.

Afterward we had a swim in our private pool, where we found quantities of Cypripedium californicum and Darlingtonia californica growing near by. After dinner we were pleasantly surprised by Merle (Albert) Sutton who came up to share our camp fire, have a cup of coffee, and talk over the pleasant adventures of the day. We agreed that the day illustrated clearly one of the most valuable advantages of membership in the American Rock Garden Society—the inspiring association with its wonderful members. The meaningful friendships can bridge the many miles between the East and the West, drawing our far-flung rock garden family closer together in deeper understanding and appreciation. The desire to learn, the love of the wild, the fascination of beautiful native plant material, are the delightful elements that bring together members from New York, Connecticut, Oregon and Washington on a little-traveled Forest Service road in Southern Oregon to share a memorable day in July.

A TOUCH OF OPTIMISM

WILLIAM J. R. ADAMSEN, Ossining, N. Y.

Certain statements have appeared in the *Bulletin* of the American Rock Garden Society in recent years, that, at least in my experience, are somewhat misleading. Suggestions have appeared periodically intimating that certain alpine plants are impossible in our climate (around New York City) and that, accordingly, as rock gardeners we should be satisfied with easy plants or low-growing native plants, especially if they provide a good flower "display".

I am not a confirmed "writer to the editor". I feel, however, obliged to make my point on this subject, since to ignore it could have a long range effect on the attitudes of many of our newer members and prospective members. I recognize that this subject could lead to acrimonious discussion, both pro and con, but it should be added, the result may be a gain in knowledge for all. At the outset, it will have to be admitted that not all growing areas in the East are similar to the New York area, and consequently it is difficult to generalize. It should also be admitted that although many alpine plants can be grown here, so do many lose their dwarf alpine characteristics.

An article in the July 1963 Bulletin stated that Loiseleuria procumbens and Linnaea borealis are difficult to raise. I believe this idea may arise from the attempts of tourists to tear out the former from the rocks; subsequently maltreat the victim with lack of water. It is then planted in some incongruous spot. Lin-

naea borealis, at least in my experience, is relatively easy to grow.

An article in the July 1962 issue stated that it is nigh impossible to grow *Empetrum nigrum* in this area. Again, I think the difficulty is attributable to an

attempt to handle wild material with harsh measures.

It is my guess that the failures encountered with the above plants and others are merely the result of incorrect methods of planting; wrong soil, wrong site, wrong digging of the wild plant, wrong moisture, wrong light balance. There are few areas where there are more alibis, but how much better to at least have tried, than to give up by saying, "it can't be done." As one gains experience, the failures diminish, and gradually a sixth sense develops as to the appropriate total conditions for a plant. In this area there is probably no finer school than trial and error, and that is why it is so helpful to have a number of plants available in order to experiment as to the best treatment. This, of course, is another advantage of seed raising.

The topic of "how to plant" has been so well treated by such experts as Hills, Farrer, and Mrs. Wilder that I would not add to such advice other than to say that the beginning gardener, or those plagued by failures, would do well to go back to the primary advice of some of these experts. Their advice, tempered by experimentation and patience, will bring success; not success every time, but a high percentage of the time. After all, I think much of the program of our Society, its very object, is to aid and encourage the members to raise the rarer, unusual, yes, the "miffy" plants; and if the objective were merely to tell about the raising of *Phlox subulata*, there would be no need for the Society at all.

The following is a list of plants, frequently described as impossible in these areas, and therefore not worth trying. All these have been grown successfully in rock gardens near New York City: (Asterisk before name indicates that the plant blooms—Two asterisks indicates that it blooms vigorously—An absence of asterisks indicates a plant that grows healthily, though it may not bloom—All plants with asterisks may be considered as likewise growing healthily).

ERICACEAE:

**Arcterica nana

**Calluna and Erica in variety

*Cassiope lycopodioides Empetrum nigrum Kalmia polifolia

Kalmiopsis leachiana Loiseleuria procumbens

Ledum species

Rhododendron lapponicum

**R. keleticum **R. impeditum

SCROPHULARIACEAE:

*Penstemon newberryi

**P. davidsonii

**P. caespitosus perbrevis

GESNERIACEAE:

*Ramonda pyrenaica

*R. nathaliae

Haberlea rhodopensis

CAMPANULACEAE:

*Campanula alpina

C. allionii

C. arvatica

*C. bellidifolia

**C. tommasiniana

**C. garganica

**Edraianthus dalmaticus

**E. pumilio

Phyteuma comosum

PRIMULACEAE:

**Primula mistassinica

**P. saxatilis

*P. hirsuta

*P. marginata

P. minima, etc.

**Androsace chamaejasme

**A. carnea

**A. lactea

*Douglasia vitaliana

D. montana

D. laevigata Soldanella alpina

S. montana

WESTERN PLANTS:

**Eriogonum ovalifolium

**Physaria geyeri

**P. didymocarpa

**Phacelia sericea Phlox hoodii

P. caespitosa rigida

P. c. condensata **Senecio canus

*Aquilegia jonesii

*A. scopulorum

*Oenothera caespitosa

*Oe. crinita

PINE BARREN PLANTS:

**Pyxidanthera barbulata

**Xerophyllum asphodeloides

**Leiophyllum buxifolium

WOODY PLANTS:

**Daphne cneorum

**D. blagayana

**D. mezereum Betula nana

*Salix uva-ursi

MISCELLANEOUS PLANTS:

**Anemone alpina

A. a. sulphurea

A. vernalis

**Draba polytricha

**Gentiana crinita

**G. acaulis

*G. sino-ornata

*G. septemfida

**G. scabra

**Lewisia cotyledon

L. tweedyi

*Polygala chamaebuxus

**P. calcarea

*P. paucifolia

Potentilla nitida

*Silene elizabethae

*S. keiskei

**Saxifraga—Kabschia in variety

**Saxifraga—Encrusted

And the list goes on. Many are the "impossibles" not mentioned here, and many of those above would be classified as *easy* by some, but at any rate, these are the facts. Perhaps others would like to write in and tell of their successes doing the impossible!

A ROCK GARDEN SHRINE

(Editor's Note) The following excerpts from a letter received by Mr. Claude A. Barr, Smithwick, South Dakota may, as Mr. Barr puts it, "furnish thought for some diffident gardeners and hints for many others." Rock gardening almost within the shadow of the Arctic Circle seems a very courageous undertaking and an account of even partial success there may serve to inspire gardeners in other handicapped areas to renewed efforts. The letter to Mr. Barr was written by the Rev. Father R. Vandersteene O.M.I. who lives and gardens at Trout Lake, via Grouard P.O., Alberta, Canada, and was dated May 26, 1964.

"The plants (from Mr. Barr's Prairie Gem Ranch) got here on the 29th of May, which of course is not an ideal date as they had been in the package since the 2nd of April. Cacti and ferns are all OK, but the other plants are in very poor condition. I planted them on arrival, however, and hope to nurse some

of them back to more life. I have seen "quite dead" plants come back to life after

a few weeks, so I'm going to try very hard to resuscitate these!

"I got your letter on the 9th of April and after that date we had no mail. Our bush pilot had an accident in a snow storm that same day. He was found only slightly bruised but his plane was a wreck. Before he got out of the maze of insurance policies and got around to borrowing a plane, break-up was here. Our break-up is a long affair as, our area being higher and colder than the surrounding country, floats cannot yet be used here when skis are of no more avail any other place. The dates we picked were perfectly correct, but an accident cannot be countered. I hope, however, that I will be able to save some plants as quite a few were not completely dry.

"Thank you very much for your letter with the information. Yes, I pick the plants for dry places very carefully because they are the only dependable ones in our area for the purpose I have in mind. Our climate is rather dry by itself, in fact after the snow goes-first half of May-we usually have no rain for weeks. By the end of July we may have a wet week or two, and fall-middle of August -is very dry again. We may have an occasional shower or some loose snow-September and October—but we usually get minus 40 degrees before there is more than one or two inches of powdery snow, end of October or beginning of

November.

"So you see how this area needs very tough plants, standing very deep cold without protection, hardy in spring frosts or summer night frosts, able to stand long periods of drought and surviving in poor soil. Outside of the low-lying willow patches our soil is all subsoil except for about one inch of black topsoil. Most of the area is covered by muskeg, peat bogs, mostly dry, and the ridges are mostly pure sand or very sandy loam, the slopes and high flats are a dry, shaly clay with some grass-humus on top, alternating with thin layers of pure sand. Even in summer most of the soil stays cool due to permafrost in lower lying areas, so the tops of a plant may be burning and the roots be quite cool.

"We have a nice variety of wildflowers, but all have a very short blooming season, one or two weeks mostly. Flowering season starts by the end of May and ends at the beginning of August. Then we get fall color in the small shrubs and other plants. Trees are leafing out in the second half of June and they color in the second half of August or the beginning of September. By the end of

September all is bare.

"Here and there in the area there are bald hills with very sparse vegetation and no grass. These are my favored hunting places for plants and they are very rewarding, but, of course, limited. I have trained some shade lovers to grow

in sun, verv dwarfed.

"The whole idea comes from many influences. I am a gardener's son, also I wanted a shrine here for the Virgin Marv. I wanted some beauty right next door. I started by trying to grow the official garden kinds. They were utterly unmanageable. I collected wild plants and they gave me the thirst for more. The whole project became a rather large rock garden shrine, with many inviting places to plant one flower, but . . . So I started looking around—to the Rocky Mountains and to South Dakota.

"Some of the places in the rocks have sun 18 hours a day, June and July, and shade only in the early morning and late evening. Others have less sun, but most have 10 to 15 hours a day in summer time, barring clouds. A small part is mostly in shade and a part is sunny and moist, and another part is shady and moist. I have arranged a variety of soils; sandy, loamy, clayey, peaty and mouldy, also some pure sand and others pure gravel. But I guess I really should send you a picture someday—it's becoming real good thanks to your help.

"I better quit talking now and do some weeding, mostly dandelions. I hope I did not bother you with all this—but being a gardener's son, I like to talk about gardening."

A PLANT PROPAGATING PROJECT

JOHN P. OSBORNE, Westport, Conn.

A few months ago a program was proposed and has been under serious consideration to broaden the services and activities of the American Rock Garden Society to include the propagation and distribution of outstanding forms and selected varieties of hardy plants suitable for rock garden subjects.

It should not be interpreted as a venture into the nursery business but rather as a limited substitute for the dwindling supply of choice rock garden plants from

commercial nurseries.

Anyone who has browsed through back issues of our *Bulletin* or the publications of the Scottish Rock Garden Club and the Alpine Garden Society must be struck by the many references to choice forms of some of our native plants that were found and to some extent propagated for a time and have since been lost to us.

No doubt some of them still exist in some old and hidden private garden but will eventually disappear unless a well planned program is established to locate them and assure their survival, and the survival of new desirable forms that may be discovered must be assured, as well.

I wish that this might have been my idea but at a meeting at Harold Epstein's home last spring he made the suggestion and a committee was formed to

study the problem and come up with some answers.

The problems are certainly imposing but I believe not impossible if we can receive the support of our members. The mechanics of moving a program of this sort along are not simple. If we were to attempt to start from scratch on a national scale, the problem of how and where to accumulate the large number of

plants needed would be formidable and time-consuming.

Basically I think we should be searching for forms of presently known species that are superior because of their color, refinement, or vigor—that are not obtainable from commercial nurserymen. Broadly, they would include herbaceous plants, bulbs, corms, and tubers. Woody shrubs and conifers of a dwarf nature should be included also, as well as selected clones worthy of naming and introducing. All should be plants of reasonably easy culture that can be handled by the average gardener.

Our present thinking is that the problem of getting started will be greatly simplified, and a good deal of time gained, by beginning on a regional basis. Committees could be set up in each region, using the same guide lines to decide the

plants to be propagated and distributed in that region.

As desirable forms are found, they could be propagated in the gardens of members, where sufficient room and suitable equipment is available, until a small stock is accumulated, at which time, in the case of the smaller regions, they could be distributed to the members of that region.

In the larger regions it might be necessary to turn the initial stock over to a professional nurseryman for further propagation, possibly on a contract basis.

As the program developed, it would seem feasible to exchange stock and eventually to bring the whole program under a central committee, and in association with some carefully selected nurseryman, to operate on a national scale similar to our successful seed exchange. Obviously, if we are to think in terms of an annual distribution, we will have to plan at least five years ahead.

Possibly financing may prove to be one of our most difficult hurdles as I doubt that the Society would be able to assume all of the burden. Suggestions have been made that the program be made available to those subscribers who would wish to contribute to its entire support. On the other hand, it might prove that a combination of some support by the Society plus a minimum charge for the plants to all members wishing to receive them would be possible.

These, as well as other facets, must still be investigated, but I believe the program is so challenging, and its success so rewarding, that it deserves the consideration and suggestions of everyone. Once this program jells, a responsible committee can carry it forward, but in the final analysis its success will depend

on the interest, vigilance, and work of all of our members and friends.

OUR WINTER GARDEN

DORETTA KLABER, Quakertown, Pa.

As I look out of my window at my hill garden on this winter day, I marvel

anew at the many kinds of beauty nature provides.

In spring everything was fresh and green and the gay colors of flowers sparkled against the big rocks. In summer the leaves on the trees and shrubs enclosed the garden and many of the rocks were hidden by lush growth. In autumn, leaves and berries added rich coloring. Now in winter it is still colorful, but so different!

The tones are muted—browns and russets, deeper greens, bronzes and dull reds—faded colors as of old tapestries. When it rains the plant colors deepen, the branches are etched in black, while the stones seem to grow lighter and glisten above their dark shadows. There is a shine on everything; the greens stand out, and that fresh, new-washed look is everywhere; a hint of spring, though it may be months away.

And when it snows—the whiteness of it; the deep pure blues of the shadows, and the strange, delightful shapes! Or, perhaps, an ice storm has struck. Then every twig, every leaf is coated. It is a brittle, glittering world to be seen but not

touched until the sun has dripped it back to normal.

When a hoar frost settles on the garden, every leaf, every blade of grass, every faded flower and head of seeds is outlined with raised white edges, emphasizing the marvelous differences in form. If one walks around the garden and looks closely at the frosted filigree, the fragile, evanescent beauty all about, one feels that never could a blossoming garden be half so beautiful.

BOOK REVIEWS

Gentians For Your Garden. By Doretta Klaber. 141 pages. 58 black and white illustrations, 5 color plates. M. Barrow & Company, Inc., New York, 1964. \$4.50.

This book is the first to be written and published in the United States entirely on gentians, and is a very welcome addition to those few already published, mostly from Great Britain. One does not have to read very far before it becomes apparent that the author has a great knowledge and understanding of gentians. Her delightful enthusiasm for these beautiful plants, among them many treasures of the alpine world, continues throughout the book. Over one hundred species and hybrids are described, most of them grown in her own garden in Pennsylvania. These include the woodland and moisture-loving species, as well as those for the rock garden and scree. Many of our American gentians are mentioned, also some from Japan, New Zealand, Europe, and the Himalayan species are not forgotten.

Although the book is written primarily for the amateur and to encourage an interest in the growing of gentians, much valuable information is there for the expert. For convenience, it is divided into chapters on gentians which flower in the spring, summer, and fall, giving descriptions and their cultural demands. The author points out that many of the most lovely of the gentians are not difficult to grow, in fact, are quite easy, if given the right, simple requirements. A chapter covers propagation, seed sowing, hybridizing, and the raising of young plants.

The book is well produced and has a good index. Included at the end are useful lists of nurseries and plant societies from which plants and seed may be obtained. One of the attractions is the many excellent drawings from life by the author herself, including six in full color. Doretta Klaber has done much to incite interest and enthusiasm for these beautiful and charming plants and her book is to be warmly recommended to all who wish to grow gentians. They have a variety and exquisiteness of blues no other genus possesses.

N. DERING MARRETT

How to Plan, Establish, and Maintain Rock Gardens. By George Schenk. 112 pages, illustrated. Lane Book Company, Menlo Park, California. 1964. \$1.95.

This excellent book should be in every rock gardener's collection. In fact,

it is quite a remarkable book.

When it speaks of the motives that tend to separate landscape gardeners and collector-gardeners as the difference between logic and love, there is a freshness

about it that is new in recent American horticultural writing.

When it refers to propagating it reminds us that plants are eager to help us, that the life purpose of plants is to propagate themselves, that they carry this ability to do so in their seeds, often in their branches, and sometimes in their leaves and roots. Well, this is nothing new, but after some of our failures, it is refreshing to hear it.

With no superfluous words it adequately covers the basic principles of rock gardening from its early beginnings through the construction, design, and plant-

ing in a clear and very readable way.

It is profusely illustrated with some very fine photographs by Don Normark,

and its description of over 800 plants is concise and accurate.

While it is written by a western gardener, its subject matter applies equally well to eastern conditions with little translation necessary.

If I had a criticism it would be that the book is worthy of having been pub-

lished in a hard-bound enduring edition.

I had heard of George Schenk off and on for a number of years and had thought of him as a rather elderly man like myself—he is barely half that.

More power to him!

John P. Osborne

To read the 112 inspirational pages of George Schenk's provocative book on rock gardening, How to Plan, Establish and Maintain Rock Gardens, is likely to reaffirm the inner desire to garden to suit oneself and let the rest of the world go hang! There may be some quarrel at first with the breadth of dimension allowed the term "rock garden" (—even to gardens without rocks!—) for the author has given the general gardener, and the specialist alike, a release from any inhibitions or preconceived formulae as to what constitutes the "acceptable" rock garden. He allows something for everyone's taste, whether it is a back corner left to "go wild", or an intricately, laboriously constructed similitude of a natural outcrop.

The author has drawn from the English and the Japanese, as well, but

mainly, and most importantly, he has taken inspiration from nature itself, which, of course, the English and Japanese had done before him. The difference, and the delight of this book, is that he has not been tempted to set down rules, traditions, nor symbols, and the work emerges allowing all these "musts" and detailed instructions, at the same time going beyond to applaud any kind of natural garden that is pleasing to the eye of the beholder.

This attitude should do much to encourage the natural or "rock" garden, whether boulder-strewn as if derived from a receded glacier, green and flowery as a mountain meadow, or "what-have-you"; the one qualification being that it must appear as if done by the hand of nature. Further, the author gives us insight in word and thought, and the excellent Don Normark photographs graphically

illustrate and inspire means of achieving this naturalness.

Rock Gardens is one of the "how-to" publications of the Lane Publishing Co., whose magazine, Sunset, is a "how-to" periodical for Western homemakers and gardeners. Neither should lose, however, in being read in Sweden, Chile, or Squibnocket Point, Mass., except that the plants would be necessarily varied to

suit climate and exposure.

Mr. Schenk uses words as a poet or a playwright must, with direction and balance, with weight, inspiration, and beauty, sometimes with hidden humor, always with telling keenness. Those of us who know his garden are inspired by his achievements as a landscape artist, as well. The plant lists clearly show his familiarity with these materials and indicate long experience with them. The suitability of the plants listed determined their inclusion in such lists, but the selections are tempered by personal preferences and animosities. The lists, as presented, contain suggestions in which both the novice and the seasoned may take heart.

Gardening is fun. So is this book! Its wisdom and wit will make it worth many re-readings, even if, perhaps *especially* if, one's bookshelf is heavy with Correvon, Farrer, et al.

Roy Davidson

A FEW CAMPANULAS

ROBERT M. SENIOR, Cincinnati, Ohio

Among the numerous species of campanulas, probably numbering more than 300, we find flowers that range in color from white through pink, violet and purple. Though there are none in the reds and none in orange, it is probable that not many gardeners realize that there are three species of a yellowish cast. One of these, *Campanula petraea*, a native of the Maritime Alps, is the least interesting since the flowers might be described as being of an unattractive yellowish-white color. It is about a foot high with branches terminating in small floral heads.

Another species, *Campanula thyrsoides*, about one foot high, is found on limestone in the Alps. It forms a dense spike of rather small straw-yellow tubular flowers terminating the firm, erect stem, which is leafy below. It is monocarpic,

but usually bears numerous seeds which germinate readily.

Campanula sulphurea, the third species, is an attractive plant, but unfortunately it is an annual. It is hardly a foot high and bears numerous good-sized, sulphur-yellow, bell-shaped flowers. It is a native of the Levant, and seeds are probably unobtainable in this country. However, if one had a correspondent in either Syria or Israel, seeds could very possibly be obtained through him. It was in this way that we originally obtained seeds from Syria. The plants bore flowers that varied in size and color, but we kept seeds from those flowers that more nearly approached a bright yellow. With us, these flowers seemed to be self-sterile,



Campanula fragilis

Robert M. Senior

and as we never saw a bee enter the flowers, we always pollinated them by hand.

A couple of years ago we neglected to perform this function, and so lost them. Though we probably could have received fresh seeds from our Syrian correspondent, we decided we would no longer continue to raise what might

be considered the purest vellow Campanula in the world.

Two of the most delightful trailing plant that we have ever raised are Campanula fragilis and C. isophylla, both natives of Italy. Unfortunately they are not reliably hardy, not, at least, in the Central States, where they cannot withstand our variable winter weather. On one or two occasions we have managed to pull C. fragilis through in a covered coldframe, although, here too, though they were kept almost bone dry throughout the winter, they were sadly bedraggled when spring arrived.

These two species have flowers and leaves that are very similar, although with us *C. fragilis* has slightly larger flowers. The violet-covered corollas are rotate, their lobes cut about halfway. Both plants have relatively small shiny leaves, those of *C. fragilis* being round, distinctly crenate, and possibly a trifle thicker than those of *C. isophylla*. *C. fragilis* started to bloom about the end of

June.

Campanula isophylla also has round cordate leaves that are dentate. It does not seem to branch quite as freely as C. fragilis does. The calyx lobes of the latter are longer, but narrower than those of C. isophylla. Both plant bloom profusely, and are equally attractive when hanging down from a basket, or drooping over the side of a bench in the alpine house. There is a white variety of C. isophylla, which, no doubt, many of our members have raised, but I have never heard of a

white C. fragilis. Both of these plants are easily propagated from cuttings, and

fresh seeds germinate readily.

As far as I know, all perennial campanulas have a 5-lobed corolla and a 3-parted style. Occasionally a corolla will be observed with six lobes, whereas other

flowers on the same plant may have the usual five lobes.

Recently we raised a seedling of the well-known Campanula poscharskyana which had an 8- to 10-lobed corolla and a 6-parted style, as well as a somewhat larger corolla than the normal plant. Moreover, the leaves were also much larger. If it were possible for us to take a chromosome count, it seems reasonable to suppose that this could prove to be a polyploid. It remains to be seen whether seedlings raised from it would revert to the normal 5-lobed corolla. If not, then, of course, it could only be propagated by clonal division. If these abnormal characteristics should remain fixed in the next generation, this should prove to be a very interesting plant for our gardens, and ultimately I should hope to distribute seeds to our members.

I would be delighted to learn if any of our members have had a similar

experience with any of their campanulas.

FOLLOW-UP ON IRISES OF THE PACIFIC COAST

Mrs. Doretta Klaber, Quakertown, Pa., writes: "Regarding Mr. Roy Davidson's article on irises of the Pacific Coast, I want to submit that gardeners

in the East need not despair of growing them.

"I grew Iris douglasiana from seed a number of years ago, planted the seedlings in half-shady woods where they didn't do particularly well. I transplanted them to the edge of a little pool. There, in a fairly moist position, they lived and flowered for several years. Perhaps a dry summer did for them, or perhaps they were overgrown by weeds, as it was a difficult spot to weed.

"I have also had *Iris tenax* from seed and it also survived for several years in an ordinary bed with just usual watering. As this was a nursery at the time. I believe I tried to divide it, and being resentful, it departed. I think that with these irises one has to know the exact time that they can be successfully divided.

"Iris innominata I have up from seed now; nice strong seedlings. I have grown it successfully before. We had the cold winters and hot summers that Mr. Davidson says it is accustomed to. A position between rocks where it was in the sun but still had a cool root run seemed to do the trick. I think it, too, was lost

by an attempt to divide it."

Now, for the Editor's experience! In the past three years we have been working with Pacific Coast irises in a limited way. Seedlings of that magnificent hybrid, Iris 'Aureonympha', developed and named by Edith Hardin English (Mrs. Carl S. English, Jr.), have been transplanted to the open woodland of our Port Townsend property. There they are associated with native grasses, mosses, and such woodlanders as Trientalis latifolia, Goodyera decipiens, Corallorrhiza striata, Holodiscus discolor, and such ericaceous plants as Gaultheria shallon, Mahonia aquifolium and M. nervosa, under second growth fir, where they get filtered sunlight and not a great amount of water, especially in summer.

Mrs. English crossed *Iris douglasiana*, the fog belt iris, with *Iris innominata*, thriving where the winters are cold and the summers hot. The gorgeous *Iris* 'Aureonympha' resulted. Its flowers are large, somewhat ruffled, and so beautifully golden, in bud and in flower. The size of mature clumps and the height of the plant precludes its use in small rock gardens, but in large ones, a well grown plant, or a grouping of them, when in full bloom, will draw every eye and bring

forth paeans of praise.

Our experience with it is that when the plant is firmly established, it will thrive in areas where there is copious water at its roots, however, Mrs. English warns that many irises are lost by too much water after being transplanted, while not yet established. Nevertheless, moisture is a necessity at that time.

Our two-year-old *Iris* 'Aureonympha' seedlings, grown in Seattle, and transplanted in the early fall to Port Townsend, bloomed sparingly the next spring, seem healthy now, and promise much for the future. Some of them produced yellow flowers, none as delightfully golden as *Iris* 'Aureonympha', but, none the less, welcome. Others brought forth flowers of a pleasing light layender.

A named form of *Iris douglasiana*, 'Pegasus', named and propagated by Mrs. English, is a most satisfying plant, with lovely white flowers having soft yellow guide lines on the petals. It is a plant of vigorous character, spreading into large, well-behaved clumps, generously sprinkled with fine white blossoms along classical lines, nicely set off by dark green foliage. It does well in partial shade. We divided mature plants of this iris in the fall, and the divisions were set out in the Port Townsend woods. They also bloomed the following spring. Mrs. English advised us to be careful when dividing Pacific Coast irises, and not divide too finely. She also told us that, contrary to the usual habit in setting out the divisions, do not cut back the newest foliage. Remove the older, partially withered leaves but leave the newer ones.

To sum up our experiences with native Pacific Coast irises and their natural and named hybrids: divide and transplant in the fall; give some moisture, but not too much; give some shade and an acid soil (under conifers seems ideal); and when dividing, be sure to keep the individual divisions sturdy with plenty of roots, and do not trim the newer leaves. Better to have a few plants that survive and flourish, than to have many that languish and depart this world.

NOTES FROM THE NORTHWEST

SALLIE D. ALLEN, Seattle, Wash.

VISITORS TO SEATTLE:—The Northwestern Regional Unit played host individually and collectively to a number of ARGS members whose travels brought them to Seattle this past summer and fall. Mr. and Mrs. Harold Epstein, Larchmont, N. Y., and Mr. and Mrs. H. Lincoln Foster, Falls Village, Conn. visited us in July, renewing old friendships and establishing new ones, after their Southern Oregon plant hunting adventures.

Also, in July, Mrs. Wm. M. Flook of Greenville, Delaware, joined us for a day of garden visits. In late August, Mr. and Mrs. Donald S. Croxton, Folsom, Cal., spent their vacation in our area, during which time they met many members who welcomed them to their gardens. From Portland, Oregon, came Mr. Ray Mackenzie in September. A delightful day was spent with Dr. Thomas Stuart, Pitlochry, Scotland, on November 1. We warmly welcome him and Mrs. Stuart as new members of the ARGS.

We sincerely hope our visitors remember their stay in the Pacific Northwest with as much pleasure as we do, and that they will return in the very near future.

REFLECTION LAKE FIELD TRIP:—Unable to attend the midsummer field trip, the writer asked our regional chairman, Mr. Scott McClanahan, to take notes in order that a report might be included in "Notes from the Northwest." Mr. McClanahan not only made the requested notes but wrote them up so charmingly that they appear in his own words, as follows:

"We have heard that everyone talks about the weather, but no one does anything about it. There was considerable talk about it previous to our scheduled July 19 field trip. Winter snows had been heavy and settled weather had not arrived. This explains our late change in plans. The trip was scheduled to Burroughs Mountain at an elevation of six to seven thousand feet on the northeast side of Mt. Rainier. The late season combined with recent snow storms had transformed this area into a white wilderness.

"So the Reflection Lake area, elevation from four to five thousand feet on the south side of Mt. Rainier was chosen a few days before the 19th. About forty members assembled at the lake at ten in the morning. Huge snow banks still lay where protected by trees and slopes, and the open patches were massed with blooming sub-alpine plants. Their freshness was exhilarating. The snow covering had just departed. The species and varieties seen will not be listed because of the great number identified. It is enough to say that the plants were vigorous (lush in some cases) and the flowers were unusually large. The lushness and enormity could have been due to the late season. They had waited a long time to come into the sunlight.

"Other pleasures were due us that day besides the beautiful and extensive arrays. As we were gathering at Reflection Lake there appeared in person, our beloved President Emeritus, Harold Epstein, Mr. Foster, our new President, and their charming wives. What a pleasure for all of us to meet these highly respected individuals who have done and are doing great and wonderful things for our

country and the ARGS.

"Mr. Epstein's health restricted him somewhat to the more level country, but he and Mrs. Epstein did, we know, enjoy the mountain air and conversations with old and new friends. To the Northwesterners, joy and inspiration resulted from these contacts. The sociability among kindred souls was a gratifying experience—and we will ever be appreciative of this visit of our honored officials.

"Mr. and Mrs. Foster were not to be outdone by even the youngest members in conquering the flowering vicinities and searching out new and exciting finds. It was a joy to see them identifying and photographing the lovely flowering specimens. No group schedule was maintained during this field trip. The "strong" went far up on the interesting trails and slopes, while the "weak" strayed only short distances from the highway. All did, however, get together for a picnic lunch. Some went home to Seattle; others stayed late.

"The age-old question has not been answered. That is, why are these striking plant specimens in such perfect order, properly spaced and arranged in lovely patterns in their wild state; but when one attempts to domesticate them, one must be satisfied with something less than this? Even though shifting mists never once revealed the snowy alpine heights of Mt. Rainier, it was a marvelous day, closing with the delightful trip down and out of the mountains along highways lined with gleaming berries, many flowers, and sparkling green coniferous forests."

OFFICERS FOR 1965:-

ARBORETUM PLANT SALE:—As previously indicated, our Northwest Unit richly benefits from the University of Washington Arboretum through our members who are directly associated with it, Mr. Brian O. Mulligan, Director, and Mr. Joseph A. Witt, Ass't. Director. At the annual Arboretum plant sale, held each fall, it was gratifying to note how well it was supported by ARGS

members, not only through purchase of the fascinating, rare and unusual plant material, but by actual work on the sale itself. Fourteen of our ARGS members worked one, two, or three days on the sale, not to mention the hours of preparation before, potting plants that these individuals propagate solely to contribute to this annual event. Three other members, each year, contribute plants numbering in the hundreds, thus supporting our fine Arboretum in this manner, as well as through their membership in the Arboretum Foundation.

ANNUAL PICNIC:—We were indeed privileged to have been invited to the home of Mr. and Mrs. Brian O. Mulligan for our annual picnic and to have had the opportunity of touring their fascinating garden. Both of them are interested in plant material from all over the world, some of which as yet is unknown in our area, but which will hopefully prove suitable for our Pacific Northwest climate. Their interest embraces all kinds of plant material; however they have special interest in trees, ferns, the *Ericaceae* family and native flora which they collect and grow very successfully.

A "potluck" dinner was served buffet style to sixty-eight members in the orchard where the many tables were placed here and there beneath the spreading branches of the fruit trees. It was a delightful setting! At the edge of the orchard we noted a collection of species roses, so seldom seen in our area; the rose hips creating a marvelous display. After dinner we were invited to tour the

garden.

With so many interesting and unfamiliar things growing in this garden, it would be impossible to assimilate everything in one visit (as a matter of fact, in many visits) although certain impressions remain outstanding. The first thing that both charmed and astonished us was a collected mountain hemlock (Tsuga mertensiana) about four feet in height decorated like a little Christmas tree with large green bells. Not believing what we saw, we looked more closely, noticing a fine vine with small, unobtrusive leaves growing up the tree trunk, branching here and there to follow the branching habit of the hemlock. It was a most original and pleasing manner of growing Godonopsis; this species was C. lanceolata.

In a well drained scree, in full sun, we had the rare opportunity of seeing a number of choice Daphne species. The tallest of the group was D. collina, forming a rounded bush perhaps eighteen inches high. D. blagayana had a fairly large leaf and a spreading habit, commanding considerable room for the spread of its rather bare branches. Two neat little species were D. arbuscula, with small narrow leaves, and the dwarf form of Daphne cneorum 'Leila Haines'. The stiffly upright-growing D. retusa was absolutely covered with large bright red berries, making this an exceptionally desirable species for both flower and fruit.

Also growing under scree conditions was Campanula pulla, the blue-purple bells borne above compact clumps three or four inches high. Both Cytisus decumbens and C. procumbens have proven tremendously satisfactory in the scree garden and the Mulligans feel that these species should be much more widely cultivated

than they are at present.

One entire section is devoted to Ericaceous shrubs and some good companion plants, all blending together in a natural setting of moss-covered logs in a woodsy soil mixture of leaf mold, peat, and rotted wood. The two species of the little-known Genus Tripetaleia may be found here. T. bracteata never seems to grow more than ten inches in height; in July it freely produces creamy white flowers. T. paniculata, much larger growing, has not as yet flowered. Another desirable rarity is the true huckleberry of the East Coast, Gaylussacia brachycera, covered with glaucous purple fruit. The choice Gaultheria species which abound in variety, berried heavily this year, some for the first time; for instance, our little na-

tives, G. humifusa, G. ovatifolia, and the Japanese G. adenothrix. Mrs. Mulligan grows tall Vaccinium species such as V. parvifolium in close association with the before mentioned small gaultherias in order to shade and protect the wee ones. The vacciniums however, are not allowed to exceed two feet in height. Under cultivation the tiny Vaccinium scoparium retains its dwarfed habit and remains semi-evergreen; interesting because it is a deciduous species in our mountains.

Before leaving this enchanting section of the garden, mention must be made of several non-ericaceous plants. The foliage of little *Cyananthus microphyllus* was intriguing in August at the time of the picnic, however it should be seen in October when it so charmingly displays its pale blue flowers. *Pityrogramma triangularis*, our temperamental native "gold-back fern" was happily growing up against a log, completely content under conditions quite different from those in its native habitat.

Close at hand was an amazing collection of ferns, many of which Mrs. Mulligan has raised from spores. In spite of the fact that the Pellaea species are exceedingly difficult in our damp climate, and some are not thought hardy, P. rotundifolia and P. atropurpurea were growing beautifully in this garden. Other appealing ferns were Polystichum setiferum plumosum, Blechnum penna-marina, a dwarf deer fern, and a densely cut-leaved licorice fern, possibly Polypodium vulgare v. pulcherrimum. One of the favorites is a very dwarf compact form of Adiantum pedatum, which never grows more than six inches high. Much to the surprise of many of us, the curious Fuchsia procumbens, not usually thought hardy, has grown well in this situation for the past four years. The very large red fruit is one of the unusual features of this species.

Seldom seen in our area, but of great interest, were two small trough gardens planted with choice treasures such as Silene acaulis, so content that it was almost indecent in the manner in which it had spread, yet it had maintained its natural compact habit. Douglasia laevigata, difficult under most rock garden conditions, was also thriving in the little troughs. Lewisia cotyledon alba and Muehlenbeckia axillaris were noteworthy companions.

Nearby was a profusion of the rosy-pink flowering Cyclamen europaeum, delightfully scented, and with attractively mottled leaves. Directly behind them was an enormous well-grown Phyllodoce caerulea, which each spring blooms heavily.

These notes can scarcely begin to relate the thrilling plant material to be found in Mr. and Mrs. Mulligan's garden. Everyone appreciated the great privilege of touring it, and regardless of the special interests of each member, I am certain they have mentally made many additions to their "wish lists" of most wanted plant material.

GROUP UNDERTAKING:—A project, near and dear to the heart of the writer, has been in progress for well over a year and has now reached a successful completion. A collection of 209 slides of Northwestern American native plants and a descriptive tape have been mailed to the Alpine Garden Society members in England and Scotland. The slides and tape are being sent to express the sincere appreciation of the ARGS for the warm response to its request for slides of their Third International Rock Garden Plant Conference, details of which are described in the October, 1963 ARGS Bulletin, pp. 106-108.

A committee which included Mrs. Brian O. Mulligan, Mrs. A. K. Free, Dr. David Metheny, and the writer, under the chairmanship of Mr. Neill Hall, was appointed over a year ago, with the plan in mind to collect slides of our flora, taken mostly in their native habitat. This was truly a group undertaking, as many of our members willingly contributed available slides, while others pur-



Cassiope ericoides

Don Normark

posely photographed plants and scenery in areas not represented. After identifying, sorting, and cataloguing, Mr. Hall called in Mr. and Mrs. H. H. Miller, who have had considerable experience with tape recordings, to help with the descriptive tape. It is with the greatest pleasure that we introduce our beautiful mountains and their unique flora to the Alpine Garden Society.

EDINBURGH, SCOTLAND:—Dr. A. R. Kruckeberg, Department of Botany, University of Washington, attended the International Botanical Congress, held in Edinburgh, Scotland, July 28-August 12. In the section, Experimental Ecology, Dr. Kruckeberg presented a paper entitled "Plant Life on Serpentines and Other Ultrabasic Rocks in Northwestern North America," (soils high in magnesium, low in calcium, as are present in the Mt. Stuart area). The invitation was extended by Dr. Kruckeberg for the United States to play host to the next Congress, and was accepted. Thus the Eleventh International Botanical Congress will be held in Seattle in 1969.

Our Editor's daughter, Miss Sharon Sutton, is now residing in Edinburgh, having accepted a teaching position through the Fulbright Exchange Teachers Program. Sherry shares her parents' enthusiasm and love of alpine plants whether in gardens or in the wild. We hope to hear from her in the pages of the Bulletin in the near future.

SOMETHING NEW!:—Despite world tensions, it is interesting to note that the way remains open between the United States and the U. S. S. R. for correspondence, and a warm and friendly exchange can occur in the field of botany. A month ago a wooden box arrived by air mail from Magadan, Siberia—the thrilling contents, five collected plants from that area of Cassiope ericoides. This

species, whose distribution is limited to a comparatively small area of Northeastern Siberia, to my knowledge, has never been cultivated nor photographed for publication anywhere in the world. The plants were planted in peat in the open garden, watered carefully, and apparently have not taken a backward look. Two

of them are blooming as this is written.

Although the individual flowers are disappointingly small in comparison with those of other *Cassiope* species, they are borne in profusion, toward the tip of each branch, giving an over-all dainty appearance. Because of the off-season bloom, recent transplanting from the wild, and long distance shipping no really accurate determination can be made concerning the size of the flowers under normal conditions. One can become very excited about the neat habit of growth and the attractive leafy structure. The long, reddish cilia are apparent to the naked eye, and to the touch, soft and downy, forming a tuft at the end of each branch.

One further interesting note; my contacts, and there have been a number, have all been scientists. They have been more than courteous, very helpful and very friendly; sending botanical data and herbarium specimens. As long as the way remains open for a friendly exchange between people with interests in common, it seems there is indeed hope for a future of understanding between countries

of the world.

WELCOME! NEW MEMBERS

Mr. Malcolm Robert Adams, 229 Roy St., Apt. 2, Ville Lemoyne, Montreal, P.Q., Canada.

Mr. J. Herbert Alexander, 1234 Wareham St., Route #4, Middleboro, Mass.

Mrs. Viola C. Billings, Harbor Road, St. James, N. Y. 11780 Mr. Edward T. Calver, 1321 East Court St., Flint 3, Mich.

Mrs. David R. Cheney, 6214 No. Highlands Ave., Madison, Wisc. 53705

Mrs. Charles H. Coleman, Jr., 1617 Notre Dame Ave., Belmont, Calif. 94002

Mr. Donald Dietrich, Bible St., Cos Cob, Conn.

Mrs. Ralph Drais, 2936 N. W. Calkins Road, Roseburg, Oregon 97470 Mr. M. H. Dryden, 3 Roundmead Ave., Loughton, Essex, England.

Mr. Dara E. Emery, 517 W. Junipero St., Apt. 2, Santa Barbara, Calif.

Mrs. Henrietta Griffin, 347 Valverde Drive, S. San Francisco, Calif.

Mrs. Laura E. Haggard, 5604 North Ave., Carmichael, Calif.

Mrs. Mary Ann Heacock, 1235 South Patton Court, Denver, Colo. 80219

Mrs. Mary Hempler, 44212 Expressway, Belleville, Mich. Mrs. Ben Johnston, 1003 W. Church St., Champaign, Ill.

Mrs. Alfred W. Jorstad, Zahl, North Dakota.

Mr. Klaus H. Lackschewitz, 636 So. 6th St. East, Missoula, Montana.

Mrs. Barbara La Briere, Box 182, Escalante, Utah 84726

Mr. Donald W. Leer, 21 Kaiwara St., Christchurch, New Zealand.

Miss Alison Little, Corrichall, Great Cornard, Sudbury, Suffolk, England.

Mrs. James J. McCaffrey, 37 Hyatt Road, Briarcliff Manor, N. Y.

Mrs. Alfred S. Martin, Orchard Lane, Three Turns, Ambler, Penna. 19002 Massachusetts Horticultural Society, 300 Massachusetts Ave., Boston, Mass. 02115

Mr. John William Mawer, 37 Ferndale Road, Upper Fern Tree Gully, Victoria, Australia.

Mrs. G. N. Meyer, 36 Dalrymple St., Red Hill, A. C. T., Australia.

Mrs. Layne Moffett, 120 Chestnut St., Youngstown, N. Y. 14174 Mrs. Stephanie S. Monahan, 5445 Adams St., Gary, Indiana 46408

Mrs. Andrew J. O'Donnell, 89 Birch St., Troy, N. Y. 12180

Dr. Shelley Orgel, 33 Stony Brook Road, Westport, Conn.

Mr. Frederick W. Robblets, 259 West Granby Road, West Granby, Conn. 06090

Mr. & Mrs. Bernard Rose, 1222 Noonan Drive, Sacramento, Calif.

Miss A. G. Scott, 174 Canterbury Road, Blackburn South, Victoria, Australia.

Mrs. I. J. Selikoff, 505 Upper Boulevard, Ridgewood, New Jersey.

Sky Hook Farm, Johnson, Vermont.

Mrs. Beatrice Smith, 1101 E. Schumacher St., Flint 7, Mich. Mrs. Sheilah Beckett Smith, Croton Dam Road, Ossining, N. Y.

Mr. Henry Frederick Stearns, Woodbine Nurseries, Main St., Germantown, N. Y. 12526

Dr. & Mrs. T. A. Stuart, Millglen, Baledmund Road, Pitlochry, Perthshire, Scotland.

Mrs. Calvin L. Stucker, P.O. Box 2035, Sacramento, Calif. 95809

Mr. & Mrs. Clinton R. Studwell, 53 Elm St., New Canaan, Conn. 06840

Mrs. Mary Walker, 11320 Ballard Road, Woodstock, Illinois 60098

Mr. Edward R. Wild, 261 Rivergate Drive, Wilton, Conn.

- Mrs. Thomas F. Wylie, Jr., R.R. #2, Deer Hill Road, Redding, Conn.

NOTES FROM H. L. F.

The actual day-to-day business of gardening is a private and rather solitary pursuit. This very fact is one of the charms and certainly one of the spiritual rewards of gardening. One can picture Reginald Farrer puttering all by himself in a remote corner of the legendary garden in Yorkshire, tucking saxifrage scraps into the limestone cliff. Or Mrs. Norman Henry at Gladwyne with her own hands planting amidst rocks the new plants collected from the mountains to the south. Neither was lonely, I suspect. But both also loved people and delighted to share their solitary joys with others of kindred spirit.

There are days when I purposely find chores in the remotest corner of the garden, away from the telephone, just to escape and be utterly alone with earth and sky and plants; yet there are few days when I would not welcome even there

a devoted fellow gardener; to talk, to commiserate, to gloat, to share.

Rock gardening is an especially private form of gardening. Each rock gardener's landscape is not like anyone else's. Beds of annuals, perennial borders, and shrubberies are predictable. There are only so many variations. And when it comes to flower arranging, the patterns are codified and strict. Not so with rock gardening. Every rock gardener is his own botanist, horticulturalist, and landscape

designer.

For these reasons the garden club routine, as such, does not appeal to most rock gardeners. But as I suggested at the beginning, even the most individualistic among us does find reward in the swapping of ideas with fellow rock gardeners. Get two or three of them together and the hours slip by in arcane talk. Suggest to them that they should form a club and they shy. But, I suspect, that if some kind of regular meetings could be arranged on an informal basis, most rock gardeners would be happy to get together with others of kindred slant to talk shop.

What I am suggesting is that the formal division of the country into organized Regional Units arises more out of the minds of constitution writers than it does out of the hearts of rock gardeners. There are, to be sure, some Regional Units within the ARGS which somehow match the pattern of common interests, of convenient geography, and congenial spirits. But the self-generation of "round robins" among our members suggests that the kind of formal programmed meet-

ings which are, and must be, the lifeblood of Regional Units, do not substitute for the day-by-day informal swapping of talk, of plants, of seed, of inspiration.

The Bulletin flourishes as the written place of fellow rock gardeners. The exchange of personal letters does bring rock gardeners together. Visiting and the trading of plants deepens the tentative and occasional meetings across distance. But I have a feeling that if, by some common urge, the members of the ARGS in a given section of the country were to study the membership list, most would find near them, rock gardeners who would welcome overtures of friendship and sharing. This does not mean a formal organization, nor an onerous burden of official duties. Of course, I realize there are now many unannounced get-togethers of rock gardeners outside the organized units, and perhaps this is the way things should continue in our rather special kind of society. It does not need the social gimmicks of "clubness" to make the dedicated and essentially solitary rock gardener happy, yet the grace notes are welcome when they happen.

Perhaps occasional, regularly scheduled, informal gatherings of rock gardeners within reasonable commuting distance, to which are invited a few potential new recruits, would not only open doors to new members, but would enrich our

own membership.

EDGAR L. TOTTEN



When Ed Totten was forced to resign the secretaryship of the American Rock Garden Society recently because of failing health, we, his fellow members felt the loss keenly. To the Society, as a whole, Ed's resignation was a blow, for no going concern can suffer the loss of one of its most devoted officers without regret. Now, Ed has been taken from us. His name has been added to the lengthening roll of those of our members who, through the brief years of the Society's existence, have made their adieus to terrestrial gardening and the plants they loved, and our regret has deepened into sorrow.

That others respected Ed in the same way as did his garden friends is shown by the homage paid him at the time of his funeral at Hendersonville, N. C., early in October, as revealed in a letter from his wife, Louise. She wrote: "The tribute paid to Ed by the Hendersonville police was most impressive. We were escorted from the house to the church by a motorcycle policeman, and on every intersection were officers and as we passed, hats were removed and placed over hearts. They did the same when we left the church, and all the way to the cemetery were officers paying tribute with the same gesture."

It is certain that Louise, her perceptions sharpened by her grief, must have seen at each intersection, standing by each officer, a gardener—a rock gardener—surely there in spirit, his hat over his heart; a heart full of compassion for her and her family; a heart wherein lay heavily a profound sense of loss; and, too, in this heart a surging emotion, crystallizing into a strengthening resolve to become a better man, a better gardener, in an effort to emulate this kindly man, this fine gardener, this Edgar L. Totten, who was so eminently fitted to show the

way.

INTERCHANGE

Flowers in Lapland—"I was so surprised by the following paragraph found in the book, The Way of the Four Winds, by Yrjo Kokko, a story of Lapland," wrote Mrs. Nevada E. Schmidt, Rt. 1, Sarona, Wisc., "that I would like to share it with the readers of the Bulletin": "The new road into Lapland uprooted the lovely rose-coloured Andromeda, sharp smelling March Ledum, white Diapensia lapponica, blue clustered Bell-flower, forever chiming their story of the Four Winds; yellow Pedicularis lapponica, driven by love so strong that their flowers are fragrant even up here in Lapland. All this glory was crushed for the sake of the road that outlanders might walk on their hard heels into the country of the Lapps. When the Lapps trod on the flowers with their moccasins it was like a caress or at worst a discourtesy; it did not mean death." Mrs. Schmidt added that other plants native to Lapland mentioned in this book were Rhododendron lapponicum, Chamaeorchis alpina, Draba nivalis, Cassiope, and Linnaea.

Diapensia lapponica—In writing about Pyxidanthera, Mr. Henry Fuller, 41
Sherwood Rd., Easton, Conn., makes this comment, "A near relative is Diapensia lapponica, of which I now have a beautiful plant from above timberline on Mt. Katahdin in Maine. The mountain summit is daily wet with cloud, mist, or rain. The soil is a mixture of coarse broken rock and peaty black vegetable matter, decayed. It is never dry. I hope to grow my Diapensia on a miniature mountain top where it can look down on its cousins (Pyxidanthera) growing in the lowlands." And Mrs. Schmidt, who already has told us of Diapensia lapponica growing in Lapland, mentioned that recently a friend had sent her a small cushion of this choice plant and that now she has growing together in her rock garden, not only this plant, but Galax.

Shortia, and Pyxidanthera.

Scotland's mountains—A member of our Northwestern Region, Miss Sharon F. Sutton, 28 St. John's Road, Edinburgh 12, Scotland, but now an exchange teacher in Edinburgh, misses no chance to travel about the Scottish country-side. In writing of a long week end trip to the Isle of Skye, she makes these observations: "The wanderer has returned again—this time from the Isle of Skye. Such a marvelous trip! I have never seen so much beautiful scenery all at once—so many spectacular views of mountains and water, all packed into a relatively small area.

"I really can't describe the country, or the feeling of it. There is a

wildness, peace, and grandeur about it that is hard to explain. The mountains are not jagged like ours and they are not rolling, either. They are quite steep and smooth-sided. There are many individual mountains, not so many lumped together in a mass. The sides often are covered with heather, dried bracken, green grass and gray rocks. The rocks often have a smooth, glaciated look. There are many waterfalls, many times spread over bare rock, and many delightful lochs—usually long and narrow. Trees are few, especially on the island, though there are many in sheltered places about towns and castles.

"Banks of huge rhododendrons hover about castles and large homes, and from a distance they all look like the same rhododendron. There are lovely green fields and villages in the valleys. Cattle and sheep, kinds that are strange to me, are seen in abundance, sometimes even on the roads. I look forward eagerly to this same trip in the spring when the flowers are in bloom."

Latest on *Pyxidanthera*—Mr. Fuller again. "Naturally," he writes, "I have been much interested in all the reporting on *Pyxidanthera brevifolia*, and superdelighted with one of the direct results: one of our members in nearby Norwalk was in Virginia and North Carolina on business and brought me three beautiful plants of *P. brevifolia*, one of which I gave to John Osborne. Two statements about the sand in which it was growing, I would like to question. They are important and could lead to failure in growing either *P. brevifolia* or *P. barbulata*. One reference was to coarse sand and the other to dry sand. But the New Jersey sand in which the latter grows is very old, very fine sand and is constantly moist below the surface. The one thing this plant can not stand is to get dry. I believe firmly that *P. brevifolia* needs the same conditions as *P. barbulata*, and I am growing them together. So is John Osborne, and his *P. brevifolia* is making new growth; it looks happy and prosperous. *Constant* moisture is, I believe, the condition of success in growing both species."

Rhododendrons for the Middle Atlantic area—Mr. Wellington F. Barto, 3600 North 27th St., Arlington, Va., writes, "Virginia Jefferis, in the July issue of the Bulletin, presented a very interesting and intriguing article on rock garden rhododendrons for the Middle Atlantic area. Where can I procure the various items on her list?" Since Mr. Barto's inquiry arrived too late for the October Bulletin, the editor forwarded his request to Mrs. Jefferis. She answered promptly, saying: "Enclosed is a copy of my letter to Mr. Barto and two copies of the list of sources, for which you may have some future use." She continued, "We, too, have had several letters and visits from people who would like to start a collection. If we were commercial nurserymen, we would have benefited considerably from the splendid presentation given my article in the Bulletin."

Others interested in the sources of supply of these rock garden rhododendrons may write to the Editor and he will send you the list of sources as sent him by Mrs. Jefferis. It is interesting to note the geographical distribution of these sources: one each for Conn., Penna., and Oregon—Two

for New Jersey, and three for Washington State.

Germination of seed of American wild flowers—Again Mr. Fuller, from whom flows a steady stream of excellent ideas, we have this suggestion. It may develop into a new, long-range project for the Society and the Bulletin. His suggestion has its origin in a question raised by Miss Alida Livingston, of New York, at a local ARGS meeting. She asked if anyone knew of a book on the germination of seeds of American wild flowers. She said that nowhere

could she find one that was satisfactory. Mr. Fuller writes as a result of this request for information, "I feel sure there is no such book but, of course, there is a considerable body of published and unpublished experience and knowledge, as well as folklore, guesses, and ignorance—but all of it widely scattered. Should not the Society, through the *Bulletin*, sponsor a systematic effort to assemble what is known already, and be on the lookout for new information as it becomes available? Over the years, this information, assembled in a systematic fashion, could be published in the *Bulletin* in a series of numbered articles." Mr. Fuller suggests that Miss Livingston, one of the Society's original members, is the one to initiate this project.

"IMPOSTORS" TURMOIL

(Editor's Note)—Mr. J. P. Zollinger's article, "Impostors in the Seed Exchange", appearing in the October issue of the *Bulletin*, has brought forth various reactions from members of the ARGS. Several of the communications appear below after having undergone a certain amount of judicious editing.

A WELCOME "IMPOSTOR" CELEBRATES INDEPENDENCE DAY

EDGAR T. WHERRY, Philadelphia, Pa.

Mr. Zollinger's notes on "Impostors" in the October Bulletin impels me to relate an incident showing that these "Impostors" are not always unwelcome. To avoid the chance of becoming a mere statistic, it has long been my practice to spend major holidays in a garden rather than on the open road. So on July 4th last, I took the bus which lands me near the site of my tiny Phlox-family garden.

Early in the year, some plants of *Polemonium carneum* had been purchased and set out in the section where western species growing on igneous rocks are being tried. One of these plants did not bloom in the spring, and had received no attention. On this bright, sunny morning in July, it had attained a height of eight inches, and it was starting to bloom. But instead of clusters of salmon-hued,

cup-shaped flowers, it was producing scattered pale yellow trumpets.

I had never seen anything like it in the wild, but had in the course of my studies, examined herbarium sheets of all known polemoniums, so its identification was a simple matter: Polemonium pauciflorum, discovered in Northern Mexico, but ranging a short distance up into adjacent Arizona and New Mexico. The seeds of this species had been listed in our Seed Exchange (a contribution, I believe, from Dr. Worth) a couple of years ago, and one seed of P. pauciflorum had somehow gotten into the packet containing P. carneum seeds; but the result was a thrill to a student of the Phlox family!

I PROTEST

ROBERT E. STUART, Stratham, N. H.

The article in the October, 1964 Bulletin, "Impostors in the Seed Exchange" by J. P. Zollinger, of Kingston, N. Y., came as a great surprise to me. In my experience with the ARGS and other amateur garden groups, which includes several years now, he is the only one I have encountered who expressed anything other than appreciation and praise for the many choice and rare plants that have been introduced to gardens via the Seed Exchanges.

He is, of course, not alone in receiving seeds that are incorrectly labeled. Surely he realizes that most of the contributors are not accomplished botanists, that many have not acquired reference libraries because of lack of funds, or lack of interest in that phase of gardening! Many have to "earn their daily bread" and do not have time to devote to the fine points of taxonomy.

Furthermore, it must be realized that expert taxonomists do not always agree. Many of us are content to grow the plants and enjoy them with a mini-

mum of attention as to their botanical classifications.

It is very easy to see how errors creep into seed lists, as Mr. Zollinger points out. Labels get mixed up, memories fail, choice seeds fail to germinate; weed seeds do. A new member, even older ones, with all good intentions, sometimes unknowingly send in some weed seeds with good ones, and so it goes. Perhaps I have been guilty of doing just that, and if so, I am sorry. And it is just possible that

Mr. Zollinger's record isn't lily white, either.

I am sure the Director of the Seed Exchange of the ARGS, Mr. Harkness, uses all reasonable care in locating mislabeled seeds and is undoubtedly as well qualified to do so, and to make corrections, as anyone. When seeds of over a thousand species are sent in, and in many cases, a half dozen or more contributors send in seeds of the same species, one can readily see that only the most obvious cases of mislabeling can come to his attention. I am sure that Mr. Zollinger would temper his criticism of seed contributors and the Seed Exchanges, if he had spent any time at all as a volunteer worker where the seeds are packaged and labeled for distribution.

No contributor, no matter how inexperienced, should hesitate to send in seeds of plants he wishes to share with fellow gardeners because of Mr. Zollinger's, to me, unjust blast at the Seed Exchanges. Try to send in clean and properly labeled seed, but if through accident a weed seed or two finds its way into your packets, I am sure that the world won't come to an end as a result.

I WAS IRRITATED

MADALENE MODIC, Sewickley, Pa.

I think Mr. Zollinger's article shows that we need rules or a pattern of some sort to guide those who collect seeds for the Seed Exchange, or plant those received from that source. There are some wrong labels along the way; seeds that won't germinate, and some precious gems (or so we thought) turning out to be weeds. We do not plant seeds and expect miracles. We proceed as we would in any business. As a plant grows from seed, it shows characteristics of what it will be at maturity. If, two or three weeks after germination, the seedlings do not check with what we have learned to expect from the seeds sown, then they should be watched carefully, and if they fail to meet our expectations, that is the time to get rid of them.

I think that rock gardening should be counted in with the arts of the world. The longer we work in a rock garden, the more we draw upon the thoughts, colors, patterns, and compositions of the world of art. It takes only a few years in a rock garden to learn the shades of green, the texture of foliage and what they do for the garden. The rock garden should be much more than an attempt to create a picture. To me, a rock garden means relaxation. If the work in the garden becomes a burden then we should find another hobby. A rock garden expresses the likes and dislikes of the one who works there. It also expresses many little characteristics of the gardener—the tidiness and the time spent in the garden—making it truly one's own garden.

If we are to become rock gardeners, we must depend on the knowledge we store away over the years. We learn by doing, by reading, and by visiting other rock gardens. There is no room for impatience. It must be a happy journey along the rock garden paths. We must learn our plants as we learn our friends. This you must believe! If we are to have rock gardens that are a joy to behold and a place for relaxation, we must believe. I say this to all beginners; if the little mistakes are going to irk you into an ill disposition—don't start a rock garden. It is not for you.

I have grown as many weeds as anyone else in my days of not knowing. There must be a spark of desire to learn within one. There must be some knowledge in the beginning to make a rock garden desirable. It is not long until we are learning a little about seeds; the color, the size, the shape that identifies them as belonging to some certain family. This is not easy, but every little bit of experience can be of help.

I have bought seeds and plants, too, to learn later on, that they were not what the labels indicated. It is often difficult to get help that know flowers from weeds. Good seed for the Seed Exchange depends on the knowledge of the collector-donor and his desire to furnish the Exchange with the best seeds possible.

I would suggest that Mr. Zollinger's article should be answered in some future *Bulletin* by Mr. Zollinger himself. Now that he has torn the Seed Exchange apart, he should proceed to put it together again. Adverse criticism is unfair, unless there are some means offered to correct the faults alleged to exist.

OMNIUM-GATHERUM

How many of you have noticed that this issue of the *Bulletin* is a few pages larger than usual? The increase from 32 to 36 pages was authorized by the Executive Board of the ARGS at a meeting in New York City, Sept. 29th. This does not mean, necessarily, that each *Bulletin* hereafter will be thusly expanded. Only the members can determine this. If they like and want a 36 page *Bulletin*, and it remains financially feasible, all the members have to do is keep supplying the editor with enough of the right kind of material. Their efforts in the past two years have kept him happy, and since a happy editor is traditionally a "rara avis", lets keep him that way.

Many other matters were taken up at this September meeting. Committees were appointed and set in motion to: 1—Revise the Constitution and the By-laws. 2—Consider an appropriate award with which the Society could honor members who have rendered distinguished service to rock gardening, and to submit names of candidates for such awards. 3—Select the dodecatheon design to become the official emblem of our Society. March 1 has been set as the deadline for the submission of drawings. All such in the hands of the editor on that date will be forwarded to the committee chairman (not yet known) immediately. Undoubtedly the results of the committee's action and other pertinent emblem information will be available for the July Bulletin.

To quote from the minutes of the meeting seems the best way to relate some exciting news, "It was suggested that because many excellent articles are interred in back issues of our *Bulletin*, consideration be given to publishing a book reprinting the most interesting of these articles. Mr. Harold Epstein has agreed to select and edit the material, and the president was asked to look into the costs of publication."

The separation of the North Atlantic Regional Unit from the national governing body of the Society has been accomplished. At a meeting in Greenwich, Conn., on October 17 the following officers were elected:

Regional Chairman—Cornelius H. Haas, 191 West Norwalk Rd., Darien, Conn. Vice-Chairman—Mrs. Alex D. Reid, Mountain Lakes, New Jersey

Secretary-Treasurer—Miss Elizabeth Preble, 138 E. 36th St., New York, N. Y. Executive Committee—Mrs. David Lesan, Cos Cob, Conn.

Mr. Jerome A. Lukins, Port Chester, N. Y. Mr. C. Norman Wade, Butler, New Jersey Mr. Henry Fuller, Easton, Conn.

Mr. H. Lincoln Foster, our president, reports that there is a committee at work on the preparation of plans for an ARGS booth at the International Flower Show to be held in New York City early in March.

NOTICE

TO THE MEMBERS OF THE NORTH ATLANTIC REGION

"The Regional officers will be happy to assist in the formation of local groups of members within the region who would be able to meet throughout the year. A start has been made in the Delaware Valley and Greater Pittsburgh areas of Pennsylvania. Other areas are under consideration. The success of the program will depend on the sustained interest and activity of the members. Anyone interested should please write to C. H. Haas, 191 West Norwalk Road, Darien, Conn., Chairman, North Atlantic Region."

Mr. Claude A. Barr, Smithwick, South Dakota, attended the Sept. 29th Executive Board meeting and writes that the cordial treatment given him in the East was both thrilling and inspiring. While in New York, he observed some of the emblem designs that had been submitted. "As to the emblem," he said, "at New York we examined a number of drawings—the artists name I cannot recall—all very much conventionalized. At the moment I have not formed an opinion. But I hope that the design chosen will not be so stylized as to be unrecognizable by an average member who is familiar with the flower."

A member who formerly lived in Oregon, Mrs. Peter H. Gourley, now a resident of Prosser, Wash., surely must have read our president's remarks published under the title "Presidential Prose" in the October Bulletin, especially the last two lines, for she writes with feeling, "Those wonderful people who bring us plants from our own regions deserve praise and assistance. I welcome their introductions and am willing to pay a higher price for such plants, even though they may not yet have been garden tested, for this is the adventure of rock gardening. It seems there are very few sources of either plants or seeds."

By the way, Mr. Foster cared not for the title "Presidential Prose" so henceforth his emanations will be brought to you under the simple title of "Notes from HLF."

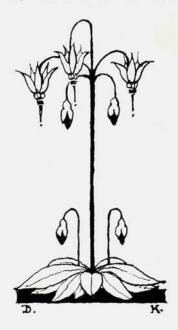
Elsewhere in this *Bulletin* you will have read with regret of the passing of Edgar L. Totten, for many years our Society's revered Secretary. Here in the Northwest, where lives the Editor, we have suffered a double blow in the untimely deaths of two of our most active and beloved members, Mimi Brandes (Mrs. Ray Brandes) first, and then Pat Ballard (Mrs. Page H. Ballard), living within a stone's throw of each other. Then followed closely the news of Ed Totten's death. We found that our capacity for sorrow was not measureable. The loss of one member is hard to bear. But when it is followed by a second, and then a third, all within a short time, it seems that the depth and sincerity of feeling; our sense of loss, our gratitude for having been allowed the privilege of knowing them, our admiration for their accomplishments, our love for them, which surely must have followed them into the beyond, and our compassion for their surviving families, is not diluted by numbers. Our emotions expand under such circumstances to encompass all.

We have learned that on September 10, 1964 (his 79th birthday) Dr. Edgar T. Wherry was awarded the Mary Soper Pope Medal of the Cranbrook Institute

of Science "for noteworthy and distinguished accomplishment in the field of the plant sciences." Among Dr. Wherry's activities was mentioned that in 1942 he "founded a new periodical, the *Bulletin* of the American Rock Garden Society, which helped revivify this organization."

Hearty congratulations, Dr. Wherry! So say your fellow members.

You will find in your copy of the *Bulletin* a membership application form. Perhaps you have gardening friends who would benefit from joining our Society. Pass the form along to them and should you need more of them, just write to Lawrence Hochheimer, Ridge Farms Road, Norwalk, Conn. 06850.



Doretta Klaber

HOW SHALL WE SAY "DODECATHEON"?

CLAUDE A. BARR, Smithwick, S. D.

To pronounce correctly the name "Dodecatheon" is worthy of serious thought. Doubtless as most of us enunciate "dodec a theon" we may be aware of a slight sensation of weightiness. On the other hand, "dodec ath eon", which is proper according to a challenging authority, is smoother, yet combines portions of two distinct elements to make, in effect, a confused separate syllable.

In either instance, the accent is placed on the antepenult according to Latin rule, in an unhyphenated combination of two Greek words. In our botanical Latin we have, of course, endless precedent for compounding, or breaking up words, and placing the accent here or there; a freedom that would surely startle or horrify a classical Roman. One result of this, as expressed by a professor of botany: "It is interesting to listen to a group of botanists in discussion; no two of them speak the same language."

But why do we concern ourselves with a controversy over an acute or a grave accent on an antepenult? Why do we not, as a Society capable of making corrections and establishing our own usage, revise the pronunciation of our

adopted and beloved emblem's honored name, and put the accent where it logi-

cally belongs?

Translate "Dodecatheon". Simplified, we have twelve gods. "Twelve" the modifying, and "gods" the emphasized word. Then returning to the Greek with the same emphasis we have "do dec a thè on"—accent grave, "e" long—the secondary accent remaining on the first syllable, and the name now rolls trippingly. Such a revision is not without precedent and no one can attach a stigma to a good innovation. Dodecathèon should in a short time become traditionally correct.

TREASURER'S REPORT FOR THE YEAR ENDING MARCH 31, 1964

| Cash in banks at March 31, 1963 | | \$4,871.78 |
|---|--|----------------|
| Income for the year: Current dues — 1963 Prepaid dues: | \$1,228. | 00 |
| 1964 | \$1,674.14 213.14 115.00 2,002. | 28 |
| Sale of Bulletins | \$ 203.40 112.74 | 50 00 60 |
| Seed Exchange Less: Expense of seed exchange | \$ 395.32 298.53 96. | 79 |
| Interest on savings account | 119. | 45 |
| Expenses for the year: Bulletin expenses: Printing | \$1,782.75 127.13 194.46 300.00 269.50 | 28 |
| C 1.F | \$2,673.84 | |
| General Expenses: Secretary's Compensation Postage Meetings expense Printing and stationary Office supplies Membership dues Telephone | \$ 557.00 198.22 44.86 38.74 28.86 10.00 2.26 \$ 879.94 | |
| Total expenses | 3,553. | 78 |

Excess of income over expenses for the year ending March 31, 1964 Cash in banks at March 31, 1964: The Northwestern Bank, Hendersonville, N. C. East River Savings Bank, New York, N. Y.

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Respectfully submitted ALEX D. REID. Treasurer

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