

BULLETIN

of the

AMERICAN

ROCK GARDEN SOCIETY

Vol. 18

October, 1960

No. 4

THOSE IRRESISTIBLE HEATHS— <i>Page and Pat Ballard</i>	97
ANDROSACES IN A NEW HAMPSHIRE GARDEN— <i>Ruth B. Manton</i>	100
A FEW NOTES FROM CLOUD HILL— <i>Doretta Klaber</i>	104
THE MINT FAMILY— <i>Robert M. Senior</i>	107
NORTH AMERICAN ALPINES IN ENGLAND— <i>Dr. H. S. Wachter</i>	111
PATRINIA TRILOBA— <i>Grace F. Dowbridge</i>	115
ON EASTERN CLIFFS—III: KATAHDIN— <i>James E. Mitchell</i>	116
MEETING OF THE NEW ENGLAND UNIT— <i>Dorothy Stillwell</i>	118
SEED EXCHANGE REMINDER	118
ANNUAL MEETING— <i>Edgar L. Totten</i>	119
BOOK REVIEW	121
TREASURER'S REPORT— <i>Alex D. Reid</i>	122
THIRD INTERNATIONAL ROCK GARDEN PLANT CONFERENCE	123
SALMAGUNDI	125

DIRECTORATE

BULLETIN

Editor Emeritus

DR. EDGAR T. WHERRY, University of Pennsylvania, Philadelphia 4, Pa.

Editor

C. R. WORTH, Ithaca College, Ithaca, N. Y.

AMERICAN ROCK GARDEN SOCIETY

President..... HAROLD EPSTEIN, Larchmont, N. Y.
Secretary..... E. L. TOTTEN, Ho-Ho-Kus, N. J.
Treasurer..... ALEX D. REID, Mountain Lakes, N. J.

Vice-Presidents

LEONARD J. BUCK MRS. HARRY HAYWARD MRS. COULTER STEWART
 FREDERICK E. LANDMANN BRIAN O. MULLIGAN

Directors—

Term Expires 1961
 Mrs. DOROTHY E. HANSELL MISS ALIDA LIVINGSTON MRS. MORTIMER FOX
Term Expires 1962
 DR. E. T. WHERRY MR. KURT W. BAASCH MR. BERNARD HARKNESS
Term Expires 1963
 MISS ALYS SUTCLIFFE MRS. M. J. FITZPATRICK DR. A. R. KRUCKEBERG

Director of Seed Exchange

 BERNARD HARKNESS
 5 Castle Park, Rochester 20, N. Y.

REGIONAL CHAIRMEN

Northwestern MR. ALTON DU FLON, 3223 Perkins Lane, Seattle, Wash.
Oregon Subgroup FLOYD W. McMULLEN, 5420 SW Alfred St., Portland, Ore.
Western RAY WILLIAMS, 108 Meidl Ave., Watsonville, Cal.
Central MRS. GLEN FISHER, Rt. 3, Box 168, Oshkosh, Wis.
Lakes ROBERT M. SENIOR, 1605 Union Trust Bldg., Cincinnati, Ohio
Southeastern RALPH W. BENNETT, 5607 N. 22nd St., Arlington 5, Va.
North Atlantic HENRY S. FLEMING, Atlas Acre, Upper Nyack, N. Y.
New England MRS. ANGIE PEASE, Auburn, Me.

Published by the AMERICAN ROCK GARDEN SOCIETY, incorporated under the laws of the State of New Jersey. You are invited to join—annual dues are: Sustaining Membership, \$10.00; Family Membership, \$5.00; Ordinary Membership, \$3.50; Life Membership, \$100.00. Address communications regarding membership, dues and other matters relating to the SOCIETY to E. L. TOTTEN, 238 Sheridan Ave., Ho-Ho-Kus, N. J. Address manuscripts and other matter relating to the BULLETIN to C. R. WORTH, Ithaca College, Ithaca, N. Y.

BULLETIN

of the

AMERICAN

ROCK GARDEN SOCIETY

C. R. Worth, Editor

Vol. 18

October, 1960

No. 4

THOSE IRRESISTIBLE HEATHS

PAGE and PAT BALLARD, *Issaquah, Wash.*

DURING THE past eight years we often have wondered just what we were doing in a Rock Garden Society. The conclusion we have reached is that, while we may not be particularly interested in cultivating rock plants, we thoroughly enjoy cultivating rock gardeners. Being among the members of the Northwest Chapter is a rare privilege and one for which we are eternally grateful. Being exposed to their enthusiasms sends us home determined to grow some of the gems they extol. But perhaps the true rock gardener has to be a purist—though our intentions may be of the best, our avowed resistance wilts when confronted by any member of the Heath Family. When we give them what they want, the non-competitive rock-lover just doesn't have a chance.

Funnybrook Farm is made up of twenty acres of uphill and downdale upon which no self-respecting farmer would waste a second glance. It is about twenty miles east of Seattle, among the foothills of the Cascade Mountains—a little too far beyond any moderating effect that Puget Sound and Lake Washington may have on the climate. Five hundred feet of elevation give us a winter temperature some ten degrees colder than that of Seattle. *Rhododendron pemakoense* thrives but its masses of flowers, more often than not, are nipped by frost. In the almost-sixty years since the original forest fell to the woodman's axe, the second-growth Douglas firs, western red cedars, and western hemlocks have stretched to a height of between seventy and a hundred feet. Bigleaf maples, Oregon ash, red alders, and willows grow rank along the creek, around the pond, and in marshy spots. Most of this we leave strictly alone. The Douglas fir grove, south of the house, receives the baby rhododendrons when they are old enough to leave the lathbeds. Species rhododendrons, *Enkianthus campanulatus*, *Clethra alnifolia*, *Menziesia lasiophylla*—all of these take root among the natives until it is difficult to say which came first. Deciduous azaleas, *Leucothoe racemosa*, and *Oxydendrum arboreum* give us splashes of fall color in the more open areas.

Because the soil around the house is predominantly a heavy clay, the easiest way to make it usable is to bring cartloads of forest duff and crumbling logs out of the woodland, to be dug into the clay and spread as mulch. Our eyes are always bigger than our capabilities, so we are constantly transplanting last year's small fry out of the spaces we thought were adequate and into situations

where they will have a bit more elbow room. The results would disturb the sleep of any landscape architect worthy of the name but this garden exists for its effect on us, not for the rest of the world.

Low-growing members of the Heath Family are not only esthetically satisfying, they are also efficient as groundcovers. They control weeds, retain the earth's moisture and anchor the topsoil. We grow them from seed, propagate them by division or cuttings, worry over their languishing, and delight in their well-being. Most of the gaultherias respond to the same conditions under which our native salal prospers, so we plant them in rotting wood and try to keep their roots moist and their stolons spreading. We were growing fifteen species until the freeze of '55 took *G. depressa*, *G. hispida*, *G. perplexa* (*Pernettya macrostigma*), and *G. hookeri*, but most of the others are still with us. *G. adonothrix*, *G. miquelana*, *G. cuneata*, and *G. procumbens* are more at home in our garden than our montane native *G. ovatifolia*. *G. wardii* has made a comeback, but the last two winters have not been too severe so its status is questionable, as is that of *G. vietchiana*, *G. itoana*, *G. sinensis*, and *G. antipoda*. Rooted cuttings of *G. forrestii* suffered no damage in 1955 but they had some protection in a lath-covered frame.

Our native *Ledum groenlandicum* and *Kalmia polifolia* adjust beautifully to garden conditions, taking on a more compact form and flowering far more heavily than they do in the bogs where we collect them. *L. palustre*, *L. glandulosum*, and *L. columbianum* respond to the same treatment. *Leucothoe polulifolia* surprised us by withstanding the Big Freeze and gives promise of being a very interesting shrub.

Seeds of *Gaulthetia wisleyensis*, from the Royal Horticultural Society, germinated wonderfully well and we are getting quite varied forms, from small-leaved, six-inch creepers to much taller, larger-leaved shrubs that leave no doubt as to their inheritance from salal. Most of our gaulthettias have compound fruits—pernettya's berry nestling in gaultheria's fleshy calyx, and the deep, rich plum color seems to be fairly constant.

Page's "do-it-yourself" stump makes a perfect setting for many of our ericaceous groundcovers. You would never guess that its firmly rooted appearance is due to several cement building-blocks and a steel fence-post or two. *Pernettya leucocarpa* nestles between two exposed roots, while *Andromeda polifolia*, *Leucothoe keiskei*, *Pieris nana* (*Arctericia*), the phyllodoces (*PP. empetiriformis*, *caerulea*, and *glandulifera*) all display their blooms against its weathered gray parts. *Menziesia purpurea*'s rosy urns compete with the larger and more deeply colored bells of *Rhododendron tsangpoense*.

Arctostaphylos uva-ursi (kinnikinnick) and its mountain-loving brother, *A. nevadensis*, drape themselves over the log bulkhead where the western sun makes the most of their berries—apple and carnelian red, respectively. *A. media*, the cross between kinnikinnick and *A. columbiana*, romps through the beds and over the steps like a small boy running away from home. We keep him in his place by taking cuttings to pass on to gardening friends.

Bruckenthalia spiculifolia is so happy that we are threatening to dig out the heathers to make room for its rosy-pink spikes. *Chimaphila umbellata* (pip-sissewa) is healthy as long as we let it grow along on old log in the woods, but when we try to give it enough light to encourage its pinkish flowers it sulks. We get some blooms in the deep shade but what gardener is ever satisfied?

Epigaea repens hides its pink fragrance under an overhanging fern, so we must kneel to give it the adoration it so justly deserves. *E. asiatica* is much more democratic and makes believe it is just another salal, stretching out across

a mossy log. Our only complaint is that some of its leaves insist on browning in the summer.

Kalmiopsis leachiana has not been in our garden very long but it is one of the few heaths we have planted in the rock garden, with its roots under a rock that faces away from the afternoon sun. It put forth blossoms at a very early age and is showing promise of more to come.

Loiseleuria procumbens is not one of our successes. It just doesn't approve of life at Funnybrook, so it usually refuses to bloom and merely exists. *Cassiope mertensiana* did well on a rocky north slope until the fatal winter of 1955. We have some well-rooted cuttings in the lathbeds and are hoping for the best. *C. lycopodiodes* was another fatality. We had been very proud of our tiny rock-bound plant until we saw the robust mound of the U. of W. Arboretum lathhouse. Now we will be happy with nothing less than an equally perfect specimen. *Moneses uniflora* has settled itself comfortably into a log bed in the grove and we are finding some seedlings around its perimeter.

Tripetaleia bracteata unfurled its three petals so smartly that we dug it up and took it to town to be photographed for the "Survey of the Heath Family" scheduled as one of the winter's educational courses at the U. of W. Arboretum. Earl Brown's (Arboretum foreman) handsome colored slides will give class members an excellent opportunity to study this three-petaled, three-to-five-sepaled, three-carpeled, mixed-up member of the Ericaceae.

These are just a few of the heaths we are growing. Each year we add the names of a few new (to us) species to our "wish list." Our methods of propagation are the simplest. We have no greenhouse, just coldframes and lathbeds. For seeds, we use two parts peatmoss and one part builder's sand, dampened and packed firmly into a clear plastic freezer carton. The seeds are sprinkled over the surface and the container is covered with polyethylene film which is taped in place. These pint-sized planter boxes line up on the north windowsill of the kitchen until the seedlings have put out their first true leaves. That is the signal to prepare a flat of two parts peatmoss, one part sand, and one part screened forest duff. A common school pen is the best tool for lifting the tiny plants. The pen point makes a perfect miniature trowel, and the nether end serves as a dibble. Half-hoops of wire are placed at each end of the flat to hold the polyethylene tent with which we protect these babies for the first ten days or two weeks. Then the plastic is punctured and opened gradually, until they are sturdy enough to accept the challenge of life in the coldframes.

We use the Else Frye ("take a cutting when you can get it") method for timing our vegetative propagation, and then treat it as L. J. Michaud taught us in the Arboretum's propagation classes. Our flats are rather deep, filled with a compost of two parts sand and one part peatmoss. The rows of wire-hooped, plastic-covered flats look, for all the world, like a fleet of covered wagons awaiting the signal of the wagon-master. When the cuttings are well-rooted they are transplanted to other flats, covered with plastic until they are firmly established, then covered and left to winter in the lathbeds.

A heath may not always be a heather, but it is always assured a warm welcome by the Ballards of Funnybrook Farm.

* * *

Send your seeds to the Exchange NOW, and start making plans to attend the Third International Rock Garden Plant Conference in London next April.

ANDROSACES IN A NEW HAMPSHIRE GARDEN

RUTH B. MANTON, *Durham, N. H.*

LITTLE HAS BEEN written of the Androsace tribe by contributors to our *Bulletin*; in the few articles that have included mention of them I have been impressed by the brevity of the comments. I am inclined to wonder why this is true. Can it be that in the last twenty-five years our rock gardeners have gone no further into their cultivation than Louise Beebe Wilder had ventured in her account of them in "The Rock Garden", published in 1935?

Seeds of *A. carnea brigantiaca*, *lactea*, *languinosa*, and *mathildae* were offered, to my knowledge, in 1953 in our own seed exchange by British and German donors. In the same year, my first as a member of the Alpine Garden Society, I received eleven packages of androsace seed, while in 1956, my first in the Scottish Rock Garden Club, I received seven packets. Throughout my notes on androsace culture are the names of such commercial dealers as Drake, Boothman, Swain, Howell, Edrom, Floraire, Thompson and Morgan, Ghose, Elliott. The American Primrose Society has given me a great deal.

There has been no lack of literature on the subject. The Alpine Garden Society has added much with the writings of C. H. Hammer and the accounts of collecting by Dr. H. Roger-Smith.

It was in England in 1953 that I first saw androsaces in pan after pan in alpine house after alpine house, and frame after frame in garden after garden. I visited the shows of the Alpine Garden Society and the fortnightly ones of the Royal Horticultural Society. I was completely captivated by the exhibits of table-size miniature rock gardens much like those exhibited in our own first rock garden show. There were other precious plants to intrigue an already "dyed in the wool" alpine gardener, but the androsaces won me completely. *Lewisia*, saxifrages and gentians were superb, but androsaces in a hundred ways kindled the fire within my heart!

In 1930, "Alpine Flowers," by Hegi, had come to me as a Christmas gift from my husband. Many years later came Schroter's "Alpen Flora." These two books portray in color many of the androsaces. To my eye they are exciting reading. Humps and buns and wisps!

When I had saturated my eye and soul for six months with my chosen androsaces I came home and immediately set about building a place to receive these exacting plants. The scree section was built simultaneously with the planting of the first packets of androsace seed that I had collected from English friends and from commercial firms in England. The seed was already old but I had no thought but that some day it would germinate, and the seedlings inhabit the garden I had built. Even as I tore my beloved garden to bits and remade it, in the image of androsace plants of that far away dream, I pictured this dear, wispy garden of today. Today, I picture this wispy garden as it will be ten years hence.

I had never grown plants from seed to any extent. I had no special flats, no special soil mixture, and I fear no special technic. I did, however, start a set of records that have served me well down my difficult way. Through these records, brief jottings, my early mistakes stand out clearly. It is interesting to note that three androsaces germinated and produced seventy seedlings that first year, *A. carnea brigantiaca*, *A. languinosa* and the biennial *A. coronopifolia*. All took their places in the scree and loved New Hampshire to a plant. The winter daunted their baby size not at all.

In green ignorance, the following spring the flats of ungerminated seed

were emptied into a valley in the garden and twenty-three more packets of androsace seed were planted. That little valley has germinated many an unnamed androsace to bedevil me through the years. From the twenty-three packages planted the second year there germinated fifty-two plants in eleven species, some in duplicate: *AA. carnea* and vars. *halleri* and *laggeri*, *charpentieri*, *hirtella*, *pyrenaica*, *septentrionalis* (an annual), *villosa* and *obtusifolia* germinated readily.

Since androsaces are so small and tedious to grow and to keep, it has been of the utmost importance to us that we keep planting seed of our failures, and also of those we have in only small quantity. You may be assured that no seed flats were emptied out that year and that next spring there was another crop of seedlings. After this, we began to keep our androsace seed in special frames, never throwing out ungerminated seed for years on end. Each year we pick up enough seedlings to repay the time and space. We have one year frames, two year frames, three year and four year ones. It will go on until we get no new arrivals. Even then the soil will be carefully incorporated in pleasant valleys where they can still join brother and sister whenever they decide to germinate.

It was not until 1956 and later that our androsaces began to react to our sowings as any other high alpine. It began to be a sure thing that seed put into the ground was bound to germinate. At about that time I read, in an English magazine, a piece of good advice. The name of the writer is forgotten but his counsel ran like this: "plant androsace seed, it will germinate in time. Check your methods and trust your seedsman." I did just that, and improved methods each sowing.

In 1956 we planted twenty-seven packets of seed; nine germinated that year and nine more the following spring. In 1957 we sowed thirty-three, with five germinating that year and twenty-three the following. You can see that the gulf is narrowing and that failures are not so frequent now. There are many causes for failure. We are planting seed each year in still greater quantity, and are sure that the frames will yield many more seedlings in the coming spring.

We are advised by the many English authorities that androsaces are better grown from seed and offer less trouble, as collected plants do not settle down very quickly. We are also advised that they come true from seed, although I have no positive way to prove that this is so.

Now, I shall give a short account of the androsaces we have raised and at present are growing here. There have been failures along the line, but always seedlings have taken the place of the few that we have lost. In looking back over the years since 1953 and evaluating our success, I can truthfully say that the androsace tribe has not been too troublesome. It has been difficult only where time and patience and miniature size is concerned. It will never produce great showy masses for the casual visitor and it must remain to be appreciated by those expert enough to notice it. It cannot be torn asunder to share with visitors. It must remain ever choice and rare!

It has seemed more proper to introduce our androsace plants to you, not in alphabetical order, but as they accepted our invitations to abide here. It may be taken that the list goes from those which any careful amateur might grow to those that demand expert attention. The *Chamaejasme* section is considered less difficult and some may be considered to "ramp." The *Aretias* are usually difficult and sometimes require more than it is possible to give them. They are last with us, yet seem very tolerant of our New Hampshire conditions. There are many species that we still seek and perhaps will never acquire.

A. coronopifolia (*lactiflora*) is a charming and very easy biennial species. It seeds over precious plants without destroying them and is easily removed from the tiniest *Kabschia saxifrage*. Its toothed leaves and flat rosettes are lovely

against moss and among *seprevivum* in the lower reaches of the garden. Mrs. Wilder loved it.

A. carnea brigantiaca forms tufts of bright green foliage and the flowers on three inch stems are pure white. It spreads nicely, takes readily to garden culture and seeds profusely. It is a choice plant.

A. languinosa trails down the faces of ledges in sun or shade and has kittens of pure silver. Its verbena-like blossoms in rosy lilac are very lovely. It is extremely easy to propagate from cuttings and to grow.

A. charpentieri is said to be very rare. Our plant has not shown any tendency to be perverse. It covers a twelve inch square and looks happy, with downy leaves. It has not blossomed but should have pink flowers. It belongs to the Aretian group.

A. lactea is an easy doer, something on the order of *A. carnea*, with mats of dark green shiny foliage. Its rather larger flowers are white.

A. carnea is showy, its flowers a brilliant pink, its foliage emerald green. It grows more rapidly than some and never looks more lovely than when contrasted with gray chippings. *A. carnea halleri* has leaves that are longer than those of the type, and is quite as easy from seed. *A. carnea laggeri* is even more showy than the other forms and has glowing pink blossoms with a golden eye. All the forms are easy from seed and easy to keep in the garden here at Kathelen.

A. septentrionalis is an annual which has not settled down to seeding as well as *A. coronopifolia* has here, but there are dozens forming a pocket of spatulate-leaved rosettes. They have white flowers, but the rosettes are as charming as can be.

A. villosa is somewhat like *A. chamaejasme* but is much smaller. Its pockets are filling with the silver rosettes. It has proven very easy here.

A. hirtella is rare. It will in time produce a dense dome. It germinates very sparingly but the seedlings seem healthy and strong. They should give flowers that are white with yellow eye.

A. pyrenaica has twice blossomed here. It is indeed minute and precious. Its tiny flowers are sessile and white. The plant is four years old and is no larger than a thumbnail. Each year another colony is added, and many now peek from their small aluminum circles.

A. obtusifolia is somewhat like *A. chamaejasme* but is said not to throw runners. It is taller, and I believe not as attractive as some, but is as yet too small for us to judge, although it has wintered in the open.

A. alpina (glacialis) is of the highest alpine heights, a rare and beautiful thing; Farrer regards its blossom of as sublime a pink as that of *eritrichium* is of blue. Some sixteen baby plants have lived in the open garden for two years.

A. albana and *A. rotundifolia* are annuals, which did not tarry over winter, nor were they especially attractive.

A. mathildae vies with *A. pyrenaica* for our vote of first love among the androsaces. It is tiny, with white flowers on almost stemless bristles, with perfectly smooth foliage that is broader than that of *A. hedraeantha*. A maple leaf can hide a dozen plants. It has wintered twice in the open and has blossomed twice for us. It is an Aretian.

A. imbricata is supposed to represent the very extreme type, according to Farrer. It is supposed to be very difficult and indeed the seed was hard to germinate. We have five beautiful plants and so far they have given no sign of not living through their second winter in the open. They are so minute that a magnifying glass is necessary for tired eyes to see the very different white foliage. This species is said to grow in cracks in granite slabs, but is in scree here.

A. lehmanii is an Aretian but seems to be easier than many. It germinated

the first year from seed but was left in the frame till the following spring. This morning, frost completely encircles its fifty or more babies in the rock garden scree where it sits so sturdily beside *A. sempervivoides*. It has not blossomed as yet.

A. sempervivoides in a year has grown to the size of a silver dollar and is already peeking over the rest of the garden with an idea of extending its quarters. It is on its way to being a very easy and pleasant plant. It is of the *A. sarmentosa* group, so should do well in all parts of the garden. It is tinged with red as autumn has approached. It will tempt a choice sempervivum to regard itself as of the same family.

A. cylindrica held itself aloof through many wearying sowings of seed. It is so small that it will indeed be a prize when we are sure we can call it really here. It is said to "rise on stepping-stones of its dead leaves till every shoot has become a dense aged column of dead foliage" by Farrer, but of course it makes scarcely a dot on the scree as yet.

A. ciliata, they say, needs most careful treatment. Indeed, it was hard to get the seeds to germinate and many trials were made before it finally relented. It seems not to be possessed by any dreams of its native land or any dislike for our little "high hill".

A. helvetica sits near *AA. ciliata*, *imbricata*, *cylindrica* and *alpina (glacialis)*; the chick chips allow tiny beady heads to breathe New Hampshire air. These are all Aretians which have been hard to woo to this garden. They say that more hearts have been broken over these Aretians than over any other plants. So far, mine have not been disturbed. We have not found them difficult in the frames, but they have been only a year in the scree.

A. brevis of the Chamaejasme group is quite easy; it looks a bit like a larger *A. carnea*.

A. hedraeantha is lovely. It blossoms on high stems and is of the Chamaejasme group with pinkish or lavender flowers. It proved very hardy in the open winter of 1958-59.

In this garden which was built for androsaces there are hundreds of other high alpine. Androsaces are just one of the many alpine plants that peek in wisps, buns or rosettes from its chipped surface and bury their long dainty roots deep within the scree mixture. I have been unduly long already, but I can hardly skip *Douglasia montana*, *D. laevigata* and *D. vitaliana*. All three are lovely and for our purpose may be considered with androsaces, to which they are closely related.

Douglasia laevigata is native to America, as is *D. montana*. In germination times these have varied, owing, perhaps, to the freshness of the seeds, the improved methods, the weather or what have you? Sometimes the seed lies over until the second year and sometimes it germinates with ease and speed. Although both are growing well, neither has as yet produced a blossom. The plants have lived in the open for more than two years and are quite easy to please in the scree.

Douglasia vitaliana has been bought in plants, as we hoped to hurry it along. It still sulks while our seedlings of the past few years are seemingly catching up and surpassing it in growth. It is so true, sometimes, that seedling plants are far better than large specimens. I like to send out tiny plants that, with care and good handling, will grow better than an overgrown, lanky specimen whose moorings are torn severely when transplanted.

In handling androsace plants of all varieties and form it is most important, we have found, to place them in their permanent homes while still minute and before they have sent their roots deep. It is also wise to consider moving other

plants that overgrow them later, rather than to let them "fight it out": the androsaces will not win. No tiny weed must crowd a baby androsace. An inch high weed, when pulled, may tear fifty baby androsaces from their moorings. I can give no better advice than to say, plant androsaces as early as possible where they are to grow and *leave them alone*. They will stand no foolish gardener's foolish whims, but they *are* hardy and they *are* easy, and they *can* be raised from seed with a slightly more careful method than is demanded by alyssum or the shrubby penstemons.



Drawings by Doretta Klaber

The exquisite pale yellow bells of *Onosma helveticum*

A FEW NOTES FROM CLOUD HILL: FALL 1959

DORETTA KLABER, Quakertown, Pa.

I DON'T KNOW whether I'm just lazy or whether old age is creeping up on me, but each year I search for easier and simpler ways of accomplishing necessary work. Last fall when I was preparing my coldframes for the winter planting of seeds, I decided to try using my regular rock garden mixtures of soil without sifting the top layer. I just covered the soil mixture (compost, topsoil, sand, stone chips, peatmoss and a small quantity of dried cow manure and all-purpose insecticide) with vermiculite—only enough to hide the soil from view. I had the



This western composite has become straggly under eastern conditions.

usual results: a few rows of seed never came up, but all the others did, not seeming to miss the sifted layer at all—primroses and gentians with their incredibly fine seeds, erigerons, rydbergias, androsaces, calceolarias, sedums, saxifrages, poppies, polemoniums, etc. No more sifting for me!

Several of the western flowers collected by Dr. Worth bloomed this spring from their winter planting. "Senecio species of drooping habit" was a pleasant yellow daisy. Their gray foliage was reminiscent of an alyssum and I hope will prove as hardy. An annual aster was a delicate lavender on finely cut foliage, but was not entirely happy here. Another yellow flowered composite has developed long thin woody branching stems, has had only a few flowers in bloom at a time, but has kept on non-stop all summer and is still going in October. I'm sure it will bloom till frost. It is a bit straggly in growth, but given just the right position, hanging over a rock or at the back of a wall, it should prove valuable.

The erigerons I yelled for, when Dr. Worth complained that they were not appreciated, came up in force. I transplanted them when one could hardly see them, for fear that they would die of overcrowding. In spite of the dreadful summer of humidity, heat and rainy spells, most of them survived and at the moment of writing (in early October) they are delighting me with their concise clumps of leaves, each species having definite characteristics of foliage, gray or green, narrow or spoon-shaped or finely cut. I have most of them on a well drained stony slope and hope for the best. They are small but look full of pep.



The "drooping senecio" is actually a form of *Chrysopsis villosa*.

Primula fauriae alba, of which I spoke last year, came up in both white and pinkish lavender. They are much like *P. farinosa* and *P. frondosa*. Their leaves are tiny when they first come up in spring, but develop into a clump about three inches across. The leaves have yellow farina on the reverse instead of white, unlike the others, and they look as though they would be sturdier plants.

Veronica corymbosa stricta turned out to be just a larger *V. spicata nana*. It grows six inches or so high, its purple spike and leaves double the size of the other's. It is an easy and useful plant like all the others of its group.

Sedum cauticolum has grown up. This year instead of one or two stems it has half a dozen radiating over eighteen inches of space, each with a large branching head of deep pink flowers at the end. Its reclining habit shows off well on the top of the wall and it is showy, a most welcome plant for late September and October bloom.

Mertensia lanceolata, roots of which I had obtained from Claude Barr last fall, bloomed on six to eight inch stems over a very long spring season. It is a delightful plant with silvery foliage and blue flowers. It was in open moist soil in half shade.

Onosma helveticum made big clumps of narrow gray-green hairy leaves, then hung out its "golden drops", the whole plant about eight inches high. It is a most attractive plant during its long blooming season in late spring, though the flowers are not gold but a soft pale yellow, while the shape of the hanging flowers is much like the old-fashioned chimney on a kerosene lamp turned upside down.

THE MINT FAMILY

ROBERT M. SENIOR, *Cincinnati, Ohio*

AMONG THE numerous families of plants, some of the most difficult for the amateur horticulturist to distinguish are the various genera pertaining to the Labiatae, commonly called the Mint family. Gray, in his "Manual of Botany", describes twenty-nine different genera found in North America, and if we were to add those not native to this country, such as *Coleus*, *Rosmarinus*, and *Sideritis*, the list included in this family would be an exceedingly lengthy one. Of course many of these, such as the hoarhound, the "dead nettle", and pennyroyal, are of no horticultural interest—and in fact may be pests in some gardens. There are, however, numerous plants that are eminently suitable for the garden, and probably everyone possesses a certain number of these, such as thyme, salvia, winter savory, or ajuga.

The reader who has several different kinds of Labiatae in his garden may be puzzled to observe what seem to be only slight differences between plants of various genera. It was this "puzzle" which led us to study the structure of some of the plants that are frequently observed. Possibly readers may find it a pleasant diversion to try to recognize these differences.

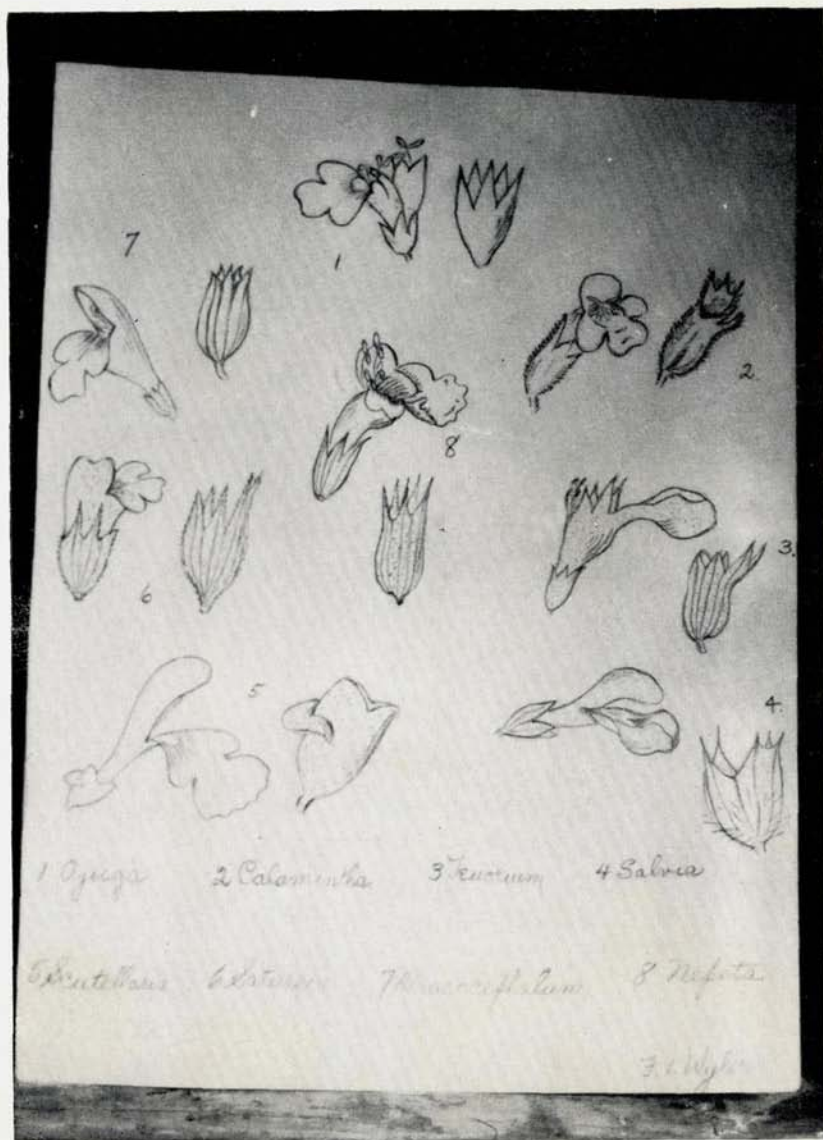
Of course it is not difficult to determine that a plant belongs to the Mint family. The first thing we observe is whether the plant has square stems, which at least all of ours have. We may then notice that any leaf on the stem grows opposite another one. Occasionally the leaves are in whorls. The flowers are irregular in shape, with the upper part one- or two-lobed, and the lower more or less three-lobed. The stamens are attached to the tube of the corolla. Finally we find that the plant frequently has a distinctive odor.

When we have decided that the plant belongs to the Mint family, then, as Bailey indicates in his "Cyclopedia of Horticulture", our difficulty really begins—and then he adds, "The characters for separating the genera reside mostly in the calyx, corolla, and stamens".

Since, as Bailey says, it is necessary to observe the floral arrangement of a plant belonging to this family, it might be well for the reader to remember some of these characteristics. As above mentioned, we notice the irregular flower, the upper lip entire or 2-parted, the lower lip more or less 3-parted; the anther-bearing stamens 2 or 4, inserted on the tube of the corolla; the calyx with 5 lobes, the lobes of equal length, or divided, with two lobes somewhat separated from the other three. Of course it must be remembered that in two species of the same genus, in addition to various shapes of the leaves, there may be variation in the length of the tube and of the calyx lobes, etc. Since some of the flowers are small, the use of a magnifying glass may be essential.

We have chosen to describe eight genera which we felt would be of horticultural interest. The accompanying picture may aid in visualizing the descriptions. We shall follow the order in which they are numbered. Incidentally, the plants mentioned under each heading are those which are suitable for the rock garden, and which, as a whole, are not difficult to grow.

AJUGA. There are several species of *Ajuga*, of which the dark bluish flowered, low growing, stoloniferous *A. reptans* is often used as a ground cover. I understand that there is also a white form, which I have never seen. The other species which we once grew is *A. genevensis*, which is not stoloniferous. Our plant was about eight inches high, with somewhat rose colored flowers. Here too, I believe there is a white flowered form. Both the above mentioned species have flowers in terminal spikes, and in the upper axils. One of the chief



characteristics of the genus is that the upper lip of the flower is very short—shorter, I believe, than in any of the other genera mentioned; the stamens, four in number, are slightly above the upper lip; the lower lobe is three-parted and spreading; the calyx lobes are about equal in length.

CALAMINTHA. Many taxonomists now place this genus under *Satureia*, but many English botanical gardens, as well as the English "Dictionary of Gardening," still retain the name *Calamintha*. The two genera have many points of similarity as, for example, the 2-parted calyx lobes, and the more or less distinct nerves of the calyx. The following description is taken from the above mentioned "Dictionary": calyx 13-nerved, 2-lipped, upper lip nearly flat, its tube

straight, stamens 4, diverging. Probably the best known in cultivation is *C. alpina*, of which Farrer, in his "English Rock Garden," says: "It makes a splendid show in July and August—a weakly ascending mass of 6-8 inch stems, each ending in violet and white lipped flowers." Farrer also speaks of the "choice and delightful" *C. grandiflora* with violet colored flowers. This plant is grown in some English botanical gardens, but where can one purchase seeds? However, seeds and plants of *C. alpina* can be secured in this country.

TEUCRIUM. Here the corolla is markedly irregular. In the picture it looks as if there were four small upper lobes, and the drooping lower lobe attracts attention by its relatively large size. One characteristic that we usually look for is the four stamens, which arise between and above the two small upper lips. Another characteristic is that the calyx is more or less distinctly 10-nerved, and its lobes are generally 2-parted. Probably the most widely grown species is *T. chamaedrys*, in which the above-mentioned characteristics can be observed easily. With us it is an indestructible plant about seven inches high with dark green leaves, which spreads slowly by underground runners. Today it covers a space of about two feet. The flowers are pinkish, and bloom in midsummer. Another plant that has occasionally been offered in seed catalogs is *T. polium*, a low growing evergreen about nine inches high, with flowers in terminal heads. I believe that this plant also blooms in summer; in fact, many of these "mints" bloom at a time when the rock garden is generally devoid of much color.

SALVIA. In this genus the corolla is strongly 2-lipped, the upper one usually concave, sometimes arched, the lower lip drooping and 3-lobed, its two side lobes often much reduced in size. There are about five hundred species, and the relative length of the floral lobes will naturally vary: in some instances, for example, the upper lobe will exceed the lower one in length, in others it may be the reverse. The calyx is generally 2-lipped, two of the lobes somewhat longer than the other three. One of the chief characteristics that we observe is that there are only two anther-bearing stamens; there may be indication of two other rudimentary stamens that do not bear anthers, so, if you think you have a salvia, and observe these two anther-bearing stamens, that in itself should be one of the most important ways of identification. In the rock garden probably the most widely grown species is *S. jurisicii* with violet-blue flowers. If I remember aright, this was offered in one of our recent seed lists. On two occasions I have raised this plant, and found it rather variable in height. The low growing form, about six inches high, was more compact and attractive; there is also a white form. Farrer, and Sampson Clay in his "Present Day Rock Garden," mention other low growing species, of which a few that are grown in some European botanical gardens are: *S. taraxacifolia*, of which Clay has a picture on page 552—these have large pink or blue flowers on four inch stems; *S. argentea*, alpine form, with large white flowers; and *S. caespitosa*, "dwarf and showy," with purple flowers.

SCUTELLARIA. In this genus we have always found the upper corolla concave and arched, entire or slightly notched, while under it grow the four anther-bearing stamens, the upper pair being somewhat shorter than the other. In the 3-parted lower corolla the middle lobe is large and the two side lobes are small, often somewhat connected with the upper lobe. The genus gets its name from the Latin *scutella*, a small dish or shield, and this characteristic applies to the 2-parted calyx, which is dilated on its upper side, forming a broad flattened crest or protuberance. As far as I know, no other member of the Mint family has this characteristic, so that if we observe this one feature on a plant, we are reasonably confident that it is a Scutellaria. Two attractive species that we have grown are *S. alpina* and *S. baicalensis*. *S. alpina* is a summer blooming

plant about ten inches high with good sized purple flowers. There are several varieties, of which we once grew *S. alpina lupularia* with yellow flowers. This plant lived several years and was attractive; it grew in light well drained soil in full sun. *S. baicalensis*, about ten inches high, with purplish flowers, also blooming in midsummer, was equally hardy; here too there are varieties with flowers in various shades of blue.

SATUREIA. Here the upper lobe of the corolla is fairly erect, flat, entire, or with a small notch at the top. The lower lobe is 3-parted and spreading, usually with its middle lobe the largest, and often faintly notched. Observe the corolla tube, which is fairly straight, with the throat somewhat inflated. There are four stamens under the upper lip, the two outer ones a trifle longer than the two inner ones. The calyx lobes are bilabiate, or almost equal in length, and the calyx has ten nerves, which are sometimes indistinct. Farrer calls these satureias "a race of charming little wiry bushlets—all children of the sun—delighting the eye with their axillary clusters of blossoms in late summer." He mentions a number of species suitable for the rock garden, such as *S. spinosa*, *S. parnassica*, *S. rupestris* and *S. longiflora*, but I have never seen one of these listed in a catalog. However there is one species that no doubt many of us have grown, which is the aromatic "winter savory," *S. montana*, with flowers of a light purplish shade. I believe that our plant is a variety, *S. montana subspicata*, which is a fairly low growing form that droops down about eighteen inches from a wall. There is also a form called *pygmaea*.

DRACOCEPHALUM. Here the flowers are in spikes or spike like racemes. The upper lip of the corolla is concave and more or less arched; the 3-lobed lower lip is spreading, with the middle one sometimes slightly notched; its tube is generally much longer than the calyx, which latter is about equally 5-toothed and 10-15-nerved and is somewhat swollen when in fruit. The four stamens are under the upper lip of the corolla, the lower pair being the longer. Possibly the best known species is *D. ruyschianum*, about eighteen inches high, which Farrer considered a "beautiful and free flowing herbaceous plant—with a profusion of big purple and white blossoms in July and August." This plant is probably too tall for the rock garden, but there are many others that are suitable; in fact Farrer and Clay mention more than thirty-five species that are low growing, but many of these are not listed in any seed catalog that I have ever seen. Of those that can probably be procured, there are the procumbent *D. botryoides*, about five inches high, with purplish flowers; *D. nutans*, about ten inches high with blue flowers; *D. alpinum*, with blue flowers; *D. grandiflorum*, which I observed was offered in the seed list of the Alpine Garden Society. It was illustrated in Curtis' Botanical magazine, table 1009, and was called the "betony leaved dragon's head." It seems to have very large bluish-purple flowers on stems about eight inches high.

NEPETA. The flowers of this genus are usually crowded in terminal and axillary spikes. The corolla is enlarged upward, and the upper lip is notched and somewhat 2-lobed, often slightly concave. The lower lobe is 3-parted, the middle one being the largest, and usually concave. The calyx has 15 nerves, and its lobes are approximately equal. As already indicated, in many "mints", the stamens vary in their arrangement: in *Nepeta* the stamens, under the upper lip, are in pairs, the two upper ones being the longer. The blue flowered *N. musini* is often grown in gardens, and the weedy "catnip", *N. cataria*, as well as the creeping "ground ivy", *N. hederacea*, are widespread. Though we have never grown the plant, Bailey, in the "Cyclopedia of Horticulture", mentions *N. grandiflora* as having beautiful blue flowers.

NORTH AMERICAN ALPINES IN ENGLAND

DR. H. S. WACHER, *Canterbury, England*

FROM THE point of view of gardeners in England, the introduction of alpine plants from North America is of comparatively recent years, for naturally those nearer home, in Europe, North Africa and Asia, have been more or less on our doorstep for several hundred years, whereas many unknown wilds of North America are still being explored for such plants. Also it is only in recent years that it has been possible to transport living plants with much chance of success, under modern rapid means of travel across an ocean which not long ago took weeks of times as against hours today. To the average gardener in England who reads of the local plants in American journals and articles, a very great number of the names, of both genera and species, convey not the slightest idea of the plants mentioned, for in many cases there is no connection or resemblance (in name) to the plants commonly grown here. Added to which there seems to be an increasing tendency of botanists to split old well-established genera, which from the point of view of the mere gardener—like myself—is too bewildering and results in still more confusion.

With regard to the cultivation of American plants, we in England must needs obtain our only assistance by reading of conditions under which they are grown in the wild and in the gardens of their native country, whereas it is possible to go and see plants as they grow in their native habitat in Europe. It is under such conditions that one always learns the most to assist in growing them successfully in a garden which is probably the home of many and various plants from all over the world and from very different altitudes. Climate is of course a very great factor to be taken into consideration also, and from all accounts our climate is very different from that of North America, where the extremes are so much greater than those of our own country. However all gardeners worthy of the name are always anxious to try new plants with a hope of success, but apart from a few popular genera, plants from North America are none too easy to obtain in this country through the usual commercial channels.

A brief note on the soil and climate of my garden in East Kent might be helpful, before describing my experiences with North American plants, which I fear have been very limited. The soil consists mainly of clay, solid some two to three feet below the surface, with slight chalk. Provided that it is properly worked at the outset and mixed with plenty of humus and stones (gravel) it is however a very satisfactory medium in which to grow many plants—especially bulbs, which need moisture in the spring during their active season and a thorough ripening during the later months, which should occur in an average summer, although the past few years have produced nothing but excessive wet and subnormal sunshine, until the season just past. Our average rainfall is about twenty-three inches per year, summer temperatures may reach 90° in the shade, and during the severe winters of 1940 and 1947 the minimum temperatures fell below zero Fahrenheit. On the whole, most of the plants I grow can withstand these temperatures provided that they come during correct periods of growth or dormancy, but unfortunately we often experience severe frosts—below 20° F.—in early autumn (October) and late spring (April), when much damage is enacted. With regard to the cultivation of my plants, all are grown (or attempted) without any artificial protection against the elements, wire netting above being used to keep off birds in spring and autumn when they can do much damage. I rely entirely on the siting of each plant to give it as nearly as possible conditions it would receive in the wild, taking into consideration the difference

in altitude where necessary. The rock garden is divided into sections for sun-lovers, woodlanders, scree and crevice plants, shade-lovers, calicicole and calcifuge plants.

With regard to my plants from North America, without hesitation I would say that erythronium gives me as much pleasure and success as any group from that country. Apart from *Erythronium dens-canis*, which is European and which I have found in the Pyrenees of France, and *E. japonicum*, all known species of this genus are, I believe, from North America. Those which I have are *EE. americanum*, *californicum*, *c. bicolor*, *citrinum*, *giganteum*, *hartwegii*, *hendersonii*, *oreganum*, *grandiflorum*, *tuolumnense*, *revolutum album* and *r. johnsonii*. This last is a real beauty with large pendant flowers of deep pink, two or three on stems ten inches high, and moreover it sets quantities of seed which produces flowering plants within three years. I grow them all in sandy leafmold on raised banks, partially shaded by placing them to the fore of dwarf rhododendrons. All are very permanent, but unfortunately are slow to increase, with the exception of *E. tuolumnense* which increases more readily than it flowers. Seed seems to be the only method of increase, but here again only *EE. revolutum*, *oreganum*, *hendersonii* and *grandiflorum* ever set seed. The difficulty in this country is to obtain any of these plants today, for none is ever offered by the trade, and all those I grow I have had since some time before the war. In mentioning dwarf rhododendrons as companions for these plants I include the delightful *Rhodora canadense*, which spreads happily by suckers, sending up eighteen inch stems covered with small pink flowers each April, before the leaves reappear.

I suppose phlox, in a great number of species and varieties, is the most popular American "alpine" grown in this country. The many hybrids of *Phlox subulata* are to be seen everywhere; they make hanging mats of tidy foliage covered in due course with flowers. With me the red-colored varieties have not the constitution of the blue-grey ones and tend to disappear after a few years unless fresh plants are raised by layering or striking cuttings. This also applies to the taller growing *P. divaricata* types, which prefer sandy peat and partial shade. For a similar site *PP. procumbens* and *reptans* both do well and increase by surface stolons. *P. adsurgens* is one of the most attractive when in flower. It appreciates sandy leafmold on a sunny ledge, but after a few years seems to exhaust itself and to disappear unless it is pulled to pieces and replanted elsewhere. *P. "mesoleuca"* has the largest flowers of all the alpine group and is said to need conditions similar to those of the species last-mentioned, but it is difficult to keep—and still more difficult to obtain anew. For gritty well-drained scree those known here as *PP. brittonii*, *bryoides*, *condensata*, *depressa*, *diffusa*, *frondosa*, *hoodii*, and *kelseyi* hold their own for a while but never increase greatly; they will not tolerate drought or too much hot sun, and may disappear if one is not always on the spot to attend to them. In conclusion concerning phloxes, readers may be interested to hear that when I was at St. Moritz in Switzerland a few years ago and was wandering about looking for the local plants, I could hardly believe my eyes at seeing a pink flowered *Phlox subulata* about a foot square growing happily on a turf bank—some two miles from any habitation. How it got there is hard to say, for none of the phloxes I grow appear ever to set seed. Possibly a native plant-lover put it there for a joke—I only hope that it may long remain there and not be eradicated by some wandering plant collector.

With regard to quantity, penstemon probably heads the list of North American endemic species. Some dozen or so of these have (I must say literally) passed

through my hands and my garden without earning their keep. Many are very shy-flowering, while others which flower well appear to exhaust themselves. The only two which I have kept for ten years or more are *P. "roezlii"*, which flowers regularly on my scree, and *P. uintahensis*, which has flowered only once and never increases in size. *PP. "crispii"* and *scouleri* were splendid for about five years but then faded away, whereas the beautiful *P. heterophyllus* always dies after flowering once.

Aquilegia is another group of which many new species have been discovered in North American in recent years, but here again the same sad story must be told: *AA. canadensis* and *scopolorum* are the only ones which do well with me in my turf bed. *AA. chrysantha*, *jonesii* and *saximontana* (among others) have all departed quickly without even flowering.

The iris group is one of my favorites and I have a large representative collection of species and hybrids. For the rock garden many are suitable, among which the Californian section provides me with *II. douglasiana*, *missouriensis*, *tenax* and *innominata*, in addition to *II. cristata*, *lacustris* and *verna*. All of these do well and are permanent in well-drained sandy leafmold free from lime, although the latter three species creep across the surface and need replanting regularly. Unfortunately *I. verna* seems impossible to obtain these days. I had it before the war but lost it on moving my garden. Now *I. lacustris* is always sent out under its name, which is exasperating as it is such a little beauty and so distinct. I hope to get the plant again some day.

Among the composites, *Chrysogonum virginianum*, *Chrysopsis villosa*, *Stokesia cyanea* and *S. praecox pumila*, and *Eriophyllum lanatum* are easy and permanent in any sunny place, but townsendias seem to be short lived.

*Lewisia*s do well for some three to four years after planting, but then tend to die out. I grow them in rock crevices and on ledges in rather stiff soil free from lime, but they seem to dislike too much hot sun. *LL. brachycalyx*, *columbiana*, *nevadensis*, *pygmaea* and *rediviva* of the deciduous types, and *LL. heckeri*, *howellii*, *cotyledon*, *millardii*, *trevosiana* have all flowered once or twice, but *L. tweedyi* always seems to have its roots destroyed by some minute insects.

Of primulas, I think *PP. parryi*, *rusbyi* and *suffrutescens* are the only North Americans I have grown, but only *P. rusbyi* ever flowered—for two or three years. This I had in the early 1930's, but I have never seen it offered or shown in this country since. Near allies to the primulas, the dodecatheons are very graceful plants for moist woodland soil with part shade, and most of those I have grown are long lived, including *DD. integrifolium*, *media*, *clevelandii*, *cusickii*, *pauciflorum* and *salinum*.

North American polemoniums are all lovely plants for the rock garden. *P. carneum* is one of my favorites and goes on happily from year to year. Others are *PP. confertum*, *flavum*, *pauciflorum*, *pulcherrimum*, *humile* and *reptans*, all of which carry on happily in sandy soil on a sunny ledge.

Sisyrinchium gives us two extremes with regard to cultivation: whereas *SS. angustifolium*, *bellum*, *bermudianum*, *californicum* and *convolutum* will flourish anywhere in overwhelming numbers from self-sown seedlings, *SS. douglasii*, *filifolium* and *adoratissimum* (the last two from the Falklands and southern South America), the most beautiful of the group, are also most temperamental. They seem to need moist turfy loam and flower very early in the spring, after which all foliage quickly disappears, often never to reappear again the following spring.

Viola from North America all seem to be true violets rather than pansies. *VV. cucullata*, *nuttallii*, *labradorica*, *papilionacea*, *sagittata*, and *septentrionalis*

all earn their keep in cool moist ledges, the only complaint being that most of them tend to sow themselves too freely around. Also for similar situations are the lovely *Mertensia maritima* and *M. virginica*, the latter always causing admiration with its twelve inch stems of blue and pink flowers. For sunny banks on the dry side oenotheras give a prolonged display of bloom from June until the first frosts of autumn; among them *O. missouriensis* with its great yellow flowers, *O. mexicana* with quantities of small pink blooms, and *OO. glaber*, *pumila*, *serrulata*, *riparia* and *triloba*, but a severe winter is always dangerous for many which are doubtfully hardy. We do not seem to receive many crucifers from across the water, but *Parrya menziesii* is always worth its place in sunny scree where it flowers throughout the summer; it tends to become leggy with age, but usually reproduces itself with self-sown seedlings in moderation.

To my mind the plants from North America which appeal most and give most success are the so-called woodland plants, which thrive in lime-free moist peaty soil with partial shade. Of course they need specially prepared sites—woodland leafmold well mixed with sand and raised to prevent stagnation of moisture, with large trees well in the background to give shade from a hot sun for at least part of the day. In such a site most of these plants do well in every way and continue permanently; they are ideal companions for collections of the smaller growing rhododendrons. Of the ericaceous species which thrive in this situation are *Epigaea repens*, *Leiophyllum buxifolium*, *Ledum labradoricum* and *L. palustre*, *Leucothoe catesbyi*, *Gaultheria procumbens*, *Vaccinium pennsylvanicum*, *Arctostaphylos myrtifolia* and *A. nevadensis*. As a carpeter beneath rhododendrons nothing could be better than *Cornus canadensis*, which runs about freely producing its white bracts followed by red berries. *Vancouveria hexandra* is another carpeter, but it needs care in placing, for the roots grow so thickly and the foliage so high—some twelve inches—that it quickly smothers less robust plants. *Dalibarda repens* is another ground cover, keeping flat on the ground and producing white flowers suggestive of those of a rubus. It is ideal for covering the ground over cypripediums, of which I grew before the war, in my old garden, *CC. pubescens*, *acaule*, *arietinum*, *californicum*, *parviflorum* and *spectabile*. But sad to relate, they all disappeared in the upheaval, and since then only the last has been obtainable in this country, and that with difficulty. The plants which are classified as shrubs, although outward appearance does not bear this out, *Galax aphylla* and *Shortia galacifolia*, hold their own but do not increase as much as their beauty deserves.

Of herbaceous plants for the front of this woodland soil bank there are *Uvularia grandiflora*, *Jeffersonia diphylla*, *Synthyris reniformis*, *Sanguinaria canadensis* with its lovely double form, *Helonias bullata*, *Prosartes oregona* which is so attractive with its quantity of large orange fruits, *Tiarella cordifolia* and *T. wherryi*, and the lovely trilliums of which *T. grandiflorum* makes a wonderful show and increases steadily in size. In the foreground or in the turf bed the tiny *Petrophytum (Spiraea) caespitosum* makes a tight little mat, and the dwarf heucheras, *HH. bracteata*, *micrantha*, *racemosa* and *rubescens* spread slowly, although they are rather shy to flower.

And so to complete the story with the end of the alphabet comes *zauschneria*, of which the most commonly seen, *Z. californica*, always refuses to bloom in a season devoid of hot sun, such as has occurred so frequently during the past few years, although it is placed in a warm sheltered spot. On the other hand, *Z. cana* is more amenable, for it flowers more regularly, is a smaller and neater plant, and the flowers are a much brighter red. Although shrubs, both are treated here as herbaceous plants, for they are always cut to the ground each winter.



Doretta Klaber
Patrinia triloba
in bud and bloom.

PATRINIA TRILOBA

GRACE F. DOWBRIDGE, *Springvale, Maine*

THREE YEARS AGO, among some gift plants, was one completely unknown to me, *Patrinia triloba*. I watched it with the greatest of interest—and with the greatest of pleasure as it grew and bloomed. It has become one of my favorite plants for its nice color and its long period of bloom in midsummer. It is apparently perfectly hardy, well-behaved, and easy to handle. The foliage clump is effective all season—another big “selling point.” The leaves are light green, shiny and waxy, reminding me of those of a ranunculus, toothed, two to three inches wide but deeply cut into three to five roughly heart-shaped lobes. The clump grows about a foot tall here, although “Hortus II” lists it to fifteen inches.

The showy bright yellow flowers are, individually, only about half an inch across, five-petaled and four-stamened (although the Valerian family, to which *Patrinia* belongs, is usually five-stamened), with tiny short spurs; they are held in flattish clusters some four inches across, close above the foliage clump. The flowers begin here about mid-July and last well into the following month. After the petals fall, the paler yellow, paper-thin seed pods remain interesting.

I have failed to find seeds and I suspect that the ants have captured them as I found the clusters covered with tiny aphids and ants after blooming last summer.

As to propagation, I have not found out the source of the original gift plant, whether nursery-bought or grown from seed. A friend has tried for several years without success to grow this from seed. The plant is slowly increasing in size and perhaps can be divided. It was safely moved from my old garden to the new one in the spring without any set-back. In both gardens it has grown in a partially shaded spot in rather acid, composted soil with quite a little moisture. The various species of *Patrinia* come from northern Europe and Asia, *P. triloba* itself from Japan.

ON EASTERN CLIFFS – III KATAHDIN: THE SOUTH BASIN, PAMOLA, AND THE TABLELAND

JAMES E. MITCHELL, *Barre, Vt.*

SITUATED IN THE heart of the Maine Wilderness, 160 miles northeast of the Presidential Range, lone and silent stands Mt. Katahdin, one of the wildest and most rugged mountains of eastern North America. It was first visited by white men in 1804 when Charles Turner, with seven white companions and some Indian guides, ascended to the top. In 1837, Dr. Jackson, State Geologist, climbed the mountain and in his report gave its height as 5300 feet. This is remarkably close to the present more accurate figure of 5267 feet, just thirteen feet less than a mile.

Henry D. Thoreau climbed the mountain on September 7 and 8, 1846, and gave an account of the ascent in his famous book, "The Maine Woods". Thoreau saw little of the mountain. On Sept. 7, he left his companions in the forest close to the tree line. While they were making camp for the night, he spent about two hours climbing to the rocks above the timber line, but did not reach the summit. The next morning they all started up the mountain, whose crest was in a mass of clouds. Thoreau pushed on through the clouds to the top of the mountain, or what he thought was the top. The remainder of the party climbed above the tree line only to the edge of the clouds and waited there until Thoreau returned, after he had spent an hour or more on what he believed was the summit. What part of the crest he visited we can only guess. There were, of course, no trails, nor had the different parts of the mountain been charted and named at that date, but it is plain from his book that he did not reach any of the mountain's highest peaks.

While Thoreau, who was a master of English, wrote a very entertaining account of his journey through the Maine wilderness to Katahdin's crest, the naturalist who is after facts about the mountain, after reading "The Maine Woods", puts it down with the feeling that this much touted nature lover, this hater of civilization, this apostle of the wilderness and the simple life was, at best, more of a dreamer than a naturalist. I have often wondered whether Thoreau's Walden sojourn, his refusal to pay his honest taxes, his other so-called eccentricities, were not after all just plain advertising of Thoreau, or as it would be called today "publicity".

At the end of "The Maine Woods", Thoreau gives a list of the plants, birds and mammals which he saw in the wilderness, and the only mountain plant

is *Vaccinium vitis-idaea*, which he found well below timberline. He failed to note a single alpine plant, and it is probably for this reason that the great botanist, Prof. Fernald, wrote that he believed that Thoreau had not reached any part of the crest.

In early July, 1900, an expedition of five botanists, headed by Prof. Fernald, spent ten days on Mt. Katahdin, making the camp at Chimney Pond their headquarters. The inaccessibility of the mountain at that date will be understood when we read in their accounts of the expedition that Stacyville on the Bangor and Aroostook Railroad was the nearest they could get by train to the mountain, and that it took them three days to go from there to the camp at Chimney Pond. Thirty-seven years later, I left my home in Vermont, 360 miles from Katahdin, at 6:00 A.M., and thirteen and one-half hours later, I was at this same camp at Chimney Pond. Some difference!

Prof. Fernald and his four companions found plenty of snow in patches on the mountain, and although they had bad weather—it rained on nine of the ten days—they succeeded in getting a representative collection of the flora of the mountain. They were so thorough that very few new plants have been found on the mountain since, other than a few grasses and sedges discovered in the northwest basin, which they did not visit. Fortunately for botanists of a later date, each of these five botanists wrote a separate account of his own part of the expedition, published in the June, 1901, issue of *Rhodora*, the official organ of the New England Botanical Club.

When I began to plan for my Mt. Katahdin trip and had ascertained how and when to get there, I started my search for information regarding the botany of the mountain. In my early youth I had read "The Maine Woods" with great pleasure; now, nearly half a century later, this was the first book I turned to, and I got out of it absolutely nothing. Then through the courtesy of the Librarian of the University of Vermont I was loaned all the bound volumes of *Rhodora*, and thus read the narratives of Prof. Fernald and his companions, and several other short accounts of Katahdin's flora. The writings of the Fernald group tell us all that is known of the flora of Maine's highest mountain, and according to their accounts, the best botanizing grounds are the Tableland, the Saddle, and the North Basin, particularly the nearly vertical walls on the north and west sides of the last.

At 6:00 A.M. on July 6, 1937, accompanied by my twenty-six year old son Eugene, I left home for the ascent of Mt. Katahdin. Our first stop was to be at Bangor, Maine, where we were scheduled to meet Walter Wilder, my photographer companion on the Gaspé trip of the previous summer. We arrived half an hour before the scheduled time, and as I stepped from my car, there was Walter waiting for us. He had arrived in Bangor the previous evening and had found the route which we were to take out of the city, so we agreed to go ahead and meet in Millinocket, the last village on the way to the mountain. There we bought all the provisions needed, received a lot of information regarding the road and the camp at Chimney Pond, and then took the Katahdin road out of the city—a rather rough road for sixteen miles to Pockwockamus Bridge. Just beyond this the road forked, and we took the one to the right, known as the Togue Ponds Road. The two miles to these ponds was over a fairly good road, but beyond them, for fifteen miles or more, it was newly constructed of gravel and was rough, perhaps seeming even rougher than it really was, because we had driven all day over good hard surfaced roads.

These last eighteen or twenty miles run right through the wilderness, but we finally reached the end of the road and found a large parking space at the base of the mountain, in which were half a dozen cars from four states. This

parking space was only three and a half miles from Chimney Pond Camp, up an easy trail. It was now 5:00 P.M. and we had about four hours of daylight ahead of us. We loaded up our packs, taking a blanket apiece, cameras and films, collecting bags and all the food we could carry and, well loaded down, started up the trail. As it was nowhere steep I wondered why the road had not been continued all the way to Chimney Pond. Later the attendant at the camp told us that the whole mountain had formerly been owned by a private individual who had presented a tract of 9,000 acres to the state with the stipulation that no auto road could ever be built into the area. Therefore the abrupt ending of the road at the edge of the tract!

(To be continued)

MEETING OF THE NEW ENGLAND UNIT

DOROTHY STILLWELL, *Woodstock, Vermont*

ON SUNDAY, May 15, 1960, twenty-four members and guests from five states journeyed to Sky Hook Farm, the home of Alice Baylor, to view her well-known auriculas and primroses. The white house is surrounded by flowers on all sides, while the huge lawns are edged with flowers inside a line of shrubbery. A slope at the rear of the house was completely covered with auriculas at their height of bloom, and there were thousands of primroses. A nursery has been added in the last year or two, and many new garden spots have been developed. The water garden showed promise of heavy bloom in a week or two. Mt. Sterling, in the distance, served as background for the beautiful display.

After inspecting the gardens the group lunched, and then Ruth Hunkins, Vice Chairman, called the meeting to order. Officers were elected and plans were made for the coming year. As May Collins is moving to Reading, Vermont, after selling her home and lovely garden in Hingham, Mass., a house warming will be held in the near future. Mr. and Mrs. Dwight Granger have invited us to view, next fall, the slides taken on their garden tour of Europe.

A plant sale was held at the close of the meeting and replenished the treasury to the point where it was at the last meeting. Many lovely plants were bid off by eager purchasers.

New officers elected were: Mrs. Angie Pease, Auburn, Maine, Chairman; Mrs. Helen Gilbert, Danielson, Conn., Vice Chairman; Mrs. Dorothy Stillwell, Woodstock, Vt., Secretary-Treasurer; Executive Committee, Mrs. Ruth Hunkins, Plaistow, N. H., Stephen Hamblin, Lexington, Mass., Mrs. Mary Granger, Warren, Mass., and Burr Bronson, Watertown, Mass.

SEED EXCHANGE REMINDER

NOW IS THE TIME—if you have not already done so—to spend an evening or two cleaning and packeting seeds and mailing them to the Seed Exchange. Remember that Mr. Harkness must have them by November 15 if they are to appear in the Seed List. Please make his task easier (we understand that he does all the work without assistance) by cleaning the seeds as thoroughly as possible and by labelling the packets correctly and *legibly*. The address again:

Mr. Bernard Harkness,
5 Castle Park,
Rochester 20, N. Y.

ANNUAL MEETING

EDGAR L. TOTTEN, *Ho-Ho-Kus, N. J.*

THE TWENTY-SIXTH annual meeting, which was attended by seventy-eight members, was a two day affair beginning at 12:30 P.M. on May 21 with luncheon and a short members' meeting and election of officers at White Hart Inn, Salisbury, Connecticut. The afternoon was spent at the nearby gardens of Mr. and Mrs. H. Lincoln Foster and Mr. and Mrs. Louis Gannett, where we were joined by some twenty additional members. Two more interesting gardens would be difficult to find. A description of them and their plants justifies a lengthy article which I hope will be forthcoming from one of our gifted writers. Unfortunately your secretary is usually so occupied at these meetings that he seldom has an opportunity to see all that is to be seen.

I wish to thank the many members who contributed so generously of such choice plant material for the plant sale that it enriched our treasury by \$184.95. Although they were unable to attend the meeting, Mr. Rudolph Nable of White Plains, N. Y., contributed a large number of dwarf conifers and other shrubs, and Mr. Ralph Bacon of Lafayette, N. J. a collection of choice saxifrages.

In the evening a group of dyed-in-the-wool rock gardeners gathered in the lounge of White Hart Inn and discussed many interesting subjects, among them plant propagation, plant hardiness and seed germination. It was well after eleven o'clock when the weary rock gardeners decided they had had enough for one day.

At 10:30 Sunday morning a cavalcade of some twenty cars formed at the inn for a trip to Mr. Foster's place from whence he guided us to the farm of a neighbor where we visited a limestone cobble (a rough rock outcrop). Permission had been given to dig any plants and to remove any stones we desired. Dig we did, and some of the more herculean members loaded their cars with stones beautifully covered with lichens. To begin with, we sighted hundreds of *Anemella thalictroides* and finally called it a day in mid afternoon when someone found a plant of *Zizia aurea*. In between, almost every plant native to the section was found, including *Orchis spectabilis* and *Cypripedium pubescens*, as well as many species of ferns including the dainty maidenhair spleenwort in a very dwarf form, ebony spleenwort and the interesting walking fern, all in abundance.

The wonderful hospitality of the Fosters and Gannetts made this perhaps the most enjoyable meeting we have had since our founding. Thanks from all of us.

Mr. and Mrs. Walter Winkler have invited us to meet at their delightful place in Saddle River, New Jersey, around the middle of May next year. The exact date and details will be published in the April 1961 issue of the *Bulletin*.

THE BUSINESS MEETING

In the absence of our president, your secretary conducted the meeting, assisted by our able director and former secretary, Mrs. Dorothy E. Hansell, who read the letter which follows this report, from our president who was sojourning in Zurich, Switzerland, at the time.

Mr. Kurt Baasch acted as chairman of the nominating committee and submitted the names of the present officers who were unanimously reelected for two year terms. The following directors were elected for three year terms:

Miss Alys Sutcliffe
Dr. A. R. Kruckeberg
Mrs. M. J. Fitzpatrick

Your secretary reported a total membership of 802, the first time we have passed the 800 mark.

THE PRESIDENT'S LETTER

Zurich, Switzerland
May 17, 1960

Dear friends,

It is with much regret that we are not with you on the twenty-sixth annual meeting of the AMERICAN ROCK GARDEN SOCIETY. Actually it is the first time we have missed since 1951, when we travelled to England for the second World Alpine Conference.

Leaving our gardens at this time of the year has been a difficult task for it is certainly the peak of the season for so many of our horticultural interests. For example, we are missing the first blooming period of a tree of *Davidia involucrata* which was planted about sixteen years ago as a young seedling. The bracts were just unfolding on this so-called "handkerchief or dove tree" as we were leaving. We feel partially compensated by viewing gardens at Villa Tarento on Lake Maggiore in northern Italy.

Yes while there were sacrifices in leaving a garden at this season, it is enriching to share in the beauty and interest elsewhere.

Visiting England at this time of year is always thrilling for the vast assortment of plants leaves one breathless and the peak of course is the great Chelsea show with its large and superb display of plants that are so perfectly grown.

Incidentally, may I call to your attention the Third World Alpine Conference, which is to be held in England (and Scotland) in April 1961. This will be just ten years since the previous conference and 25 years since the first which was held in 1936. While we did have several members attend each of these in the past, it would seem that with the improvement of plane transportation that a much larger group will attend the forthcoming event. In fact, there has been some preliminary conversation relating to the possibility of chartering a flight by the American Rock Garden Society for this important event. In order to accomplish this economical trip, we will require a registration of a minimum of 75 members (individuals). The two way flight would cost between \$250 and \$300 per person or about half the regular economy cost. The trip could be arranged for a period of two, three, or four weeks, to suit the wishes of the group. In order to give serious consideration to this plan please advise Mr. Totten of your interest and participation in this trip. These chartered flights must be arranged several months in advance and no time should be lost in planning.

In reviewing the operations of the American Rock Garden Society for the past two years, the most prominent aspect is the ability to continue with the same dues structure that we initiated at is organizaion 26 years ago. There are few organizations that can boast this extreme of economy particularly with the inflationary trend of the dollar, and this accomplishment is primarily the result of the devotion and arduousness of our secretary Mr. Edgar Totten. He has devoted so much of his time to the A.R.G.S. and has created goodwill through his contacts. The A.R.G.S. is and will be indebted to him for his many kindnesses and sacrifices. I have just learned that he is considering moving to the

southwest and so could not continue with this excellent work. If the task of secretary cannot go with him, we shall certainly miss his valuable services and must immediately seek a worthy successor to this job. If you can suggest an eligible and devoted person, please confer with Mr. Totten.

You will undoubtedly receive a report from both Mr. Totten and Mr. Reid, our treasurer, who will briefly acquaint you with our statistical and financial situation. You will also learn about a change in our Seed Exchange. This will again be directed by Mr. Bernard Harkness, who will succeed Dr. Kruckeberg of Seattle who directed this arduous task so commendably for the past three years. (Mr. Harkness' address is 5 Castle Park, Rochester 20, N.Y.).

You will also be interested in knowing that the Middle Atlantic group will now have as its chairman Mr. Jerome Lukins (Jerry) who will undoubtedly sponsor some new activities in the New York area. Mr. Lukins is succeeding Mr. Fleming whose continuous absence from the area in pursuit of his professional position forced his resignation.

At this meeting you will be asked to vote on a slate of officers and directors for the next two years. If the nominating committee desires to again place my name as a candidate for the succeeding two year presidency, I have given my consent only providing that it will be my final term. Many of you will recall that I was first elected to this position in 1948 so that I have served for six two year terms or a total of 12 years. While I have been proud to accept this leadership and enjoyed the work involved, I believe that a younger and keenly interested successor must be sought for the future. I therefore recommend that the Board of Directors and the general membership keep this matter before them.

I am certain that all of you will thoroughly enjoy this weekend as planned for you. I have visited the Fosters previously and know the extent of their enthusiasm and the interesting and beautiful garden they have constructed. We are indeed indebted to them for making this visit possible.

I must again express my regret in not being with you this day. We convey our very best wishes to all of you.

HAROLD EPSTEIN

BOOK REVIEW

Handbook on Trees and Shrubs—Where to Buy Them. Henry Teuscher, editor. 68 pages, illustrated. New York: Brooklyn Botanic Garden, 1960. \$1.00.

Designed to answer the frequent query, "Where can I buy . . . ?", this Handbook gives extremely terse descriptions of nearly 1,000 species and varieties of woody plants, together with symbols indicating which of a list of 103 nurseries offer a particular sort. Separate sections are devoted to dwarf conifers, evergreen trees, dwarf or low-growing shrubs, flowering shrubs, shrubs planted for foliage and fruits, flowering trees, deciduous trees planted for foliage. There are indices of both common and scientific (genus only) names. Among the "less usual" trees and shrubs it is rather startling to find *Hydrangea paniculata grandiflora* and common privet, but many unusual kinds are listed. The usefulness of the Handbook will vary with the interests of the gardener: this reviewer could not find sources for several clones which have been in the American trade, yet found listings of some (notably dwarf conifers), of whose availability he was not aware. Hardiness ratings are decidedly on the cautious side.

AMERICAN ROCK GARDEN SOCIETY

Treasurer's Report
Year Ending March 31, 1960

Cash in bank at March 31, 1959		\$3,651.93
Receipts for the year:		
Current dues — 1959		\$ 914.13
Prepaid dues — 1960	\$1,637.13	
1961	153.85	
1962	86.00	
		1,876.88
Sale of Bulletins		127.73
Seed exchange		266.60
Sale of books		136.76
Advertising in Bulletin		170.57
Plant sales and annual luncheon		490.50
Gift		25.00
Interest on savings account		38.24
Total receipts		\$4,046.41
Disbursements for the year:		
Bulletin expenses:		
Printing	1,592.51	
Cuts	145.62	
Mailing and postage	123.08	
Editor's compensation	300.00	
Mailing permit	20.00	
Total Bulletin expenses	\$2,181.21	
General expenses:		
Secretary's compensation	384.50	
Printing and stationery	116.35	
Seed exchange printing	203.17	
Postage	84.38	
Telephone	8.14	
Office supplies	48.31	
Insurance on equipment	25.00	
Dues to American Horticultural Council	8.00	
Refund of member's dues	30.00	
Cost of books sold	90.37	
Bank charges and miscellaneous	15.02	
Annual luncheon	276.00	
Total general expenses	1,289.24	
Total disbursements		3,470.45
Excess of receipts over disbursements for the year ending March 31, 1960		575.96
Cash in bank at March 31, 1960:		
Citizens First National Bank & Trust Co. Ridgewood, New Jersey:		
Checking account		\$2,924.52
Savings account		1,303.37
		\$4,227.89

Respectfully submitted,
Alex D. Reid, Treasurer

THIRD INTERNATIONAL ROCK GARDEN PLANT CONFERENCE

THE THIRD International Rock Garden Plant Conference, arranged jointly by the Alpine Garden Society and the Scottish Rock Garden Club, with the cooperation of the Royal Horticultural Society and of the Regius Keeper, Royal Botanic Garden, Edinburgh, will be held in London and Edinburgh, from Tuesday, April 18, to Friday, April 28, 1961.

It is hoped that many of our members will take advantage of this infrequent opportunity to hear a series of papers by experts, to see superb specimens of the choicest alpinists and to visit famous gardens, and to exchange ideas with rock gardening celebrities. As mentioned in the President's message in this *Bulletin*, it is hoped that there will be sufficient American visitors to the Conference to make possible the chartering of a plane for the trip, at greatly reduced rates. Anyone who may be interested should communicate with Mr. Totten at once.

The program, subject to minor adjustments, has been announced as follows:

LONDON

Tuesday, April 18, 1961

An exhibition of Colour Films and Transparencies by Overseas Members.
Conference Show opens.

The President and Council of the R.H.S. entertain Overseas Delegates to Luncheon.

AFTERNOON SESSION

The President of the A.G.S. will open the Conference.

Paper:—"Rocky Mountain Flora." Dr. C. R. Worth, U.S.A.

EVENING SESSION

The Alpine Garden Society's Conference Dinner.

Wednesday, April 19th

MORNING SESSION

Conference Show open (second day).

Paper:—"European Orchids." Prof. R. M. May, France.

Discussion:—"Plants in the Show." Invited speakers, 2 home, 2 from abroad.

AFTERNOON SESSION

Paper:—"Some Interesting Plants from the Eastern Mediterranean." Mr. M. Ogilvie Grant, Greece.

Paper:—"Alpine House Cultivation." Mr. R. C. Elliott.

EVENING SESSION

Horticultural Club Dinner for Overseas Visitors.

This will be followed by a showing of colour films of English Gardens.

Thursday, April 20th

MORNING SESSION

Paper:—"Interesting Plants seen during my Travels." Mr. Eliot Hodgkin.

Symposium:—"My experience in the growing of difficult Genera." Invited speakers, 2 home, 2 from abroad.

AFTERNOON SESSION

Excursion to the Royal Horticultural Society's Gardens, Wisley.

Friday, April 21st

Excursion to the Royal Botanic Garden, Kew and Windsor Great Park.

Saturday, April 22nd

Excursion to the President's Garden and to the Cambridge Botanic Garden.

EDINBURGH

Monday, April 24th

MORNING SESSION

Welcome to Edinburgh by the Hon. President, S.R.G.C.

Paper:—"The Peat Garden." Mr. E. E. Kemp.

Paper:—"Gentians." Mr. David Wilkie.

AFTERNOON SESSION

Paper:—"The Heather Garden." Mr. F. P. Knight.

Visit and Tour of the Rock Garden, Heather Garden and Peat Garden, The Royal Botanic Garden, Edinburgh.

EVENING SESSION

Civic Reception by the Lord Provost of the City & Royal Burgh of Edinburgh, City Chambers, High Street, Edinburgh.

Tuesday, April 25th

MORNING SESSION

Discussion:—"Has the Rock Garden a place in the Modern Garden?" Mr. Joe Elliott and Mr. Harold Esslemont.

Paper:—"Dwarf Conifers." Mr. H. C. Hillier.

AFTERNOON SESSION

2 p.m. Opening Ceremony, Edinburgh Conference Show.

EVENING SESSION

Talk:—"Plants from the Show Benches." Mr. Will Ingwersen.

Wednesday, April 26th

Excursion with visits to the Gardens of Maj. and Mrs. Knox Finlay, Keillour Castle, Methven, and Mr. and Mrs. J. T. Renton, Branklyn, Perth.

EVENING SESSION

Colour and Sound Film by Mr. R. C. Elliott.

Colour Film with commentary by Maj. G. Sherriff.

Thursday, April 27th

MORNING SESSION

Paper:—"Bulbs for the Rock Garden—two viewpoints." Mr. E. B. Anderson and Mr. T. H. Hoog.

Paper:—"Some Rock Garden Plants from Patagonia." Mrs. Ruth Tweedie.

AFTERNOON SESSION

Paper:—"The Habitats of some rare Rock Garden Plants." Dr. W. Schacht.

Visit to the Royal Botanic Garden or S.R.G.C. Show.

EVENING SESSION

Symposium:—"Shows, Showing and Judging." Mr. E. B. Anderson, Mr. W. Ingwersen, Mr. J. L. Mowat and Dr. Henry Tod.

Friday, April 28th

Symposium:—"Tricky Rock Garden Plants; their cultivation." Mrs. Boyd-Harvey, Mr. Jack Drake, Mr. Roy Elliott, a speaker from Overseas.

The Scottish Rock Garden Club's Conference Luncheon.

THE CONFERENCE CLOSES

SALMAGUNDI

THE SPECIFIC name of a plant depends entirely on its oldest authoritative description. . . . In the matter of genera, however, the case is different. No botanist has it in his power to alter an authorised specific name: all botanists of repute have a perfect right to redistribute races at their pleasure. And this is a vagary with which it is impossible finally to cope." So wrote Farrer at a time when Rydberg, Small, et al. were dissecting *Gentiana* and *Oenothera* (for example) into myriad tiny genera and calling clones of Louisiana iris distinct species! Of late the trend has been away from species-splitting toward lumping of forms that in the gardener's eye remain distinct, whatever their taxonomic similarities. The extremes of a variable species may be totally different plants: in our garden there has just passed out of bloom a plant, grown from personally collected seed, of what has been determined as *Aquilegia scopulorum*. It grew more than a foot high, with its green leaflets widely expanded; only in the flowers did it show any resemblance to the compact blue-silver tufts from other localities.

Perhaps to counterbalance the currently conservative concept of species, systematic botanists are now having a field day with genera, and the bewildered horticulturist can only shout "May Day!" A few years ago we were startled at being unable to find, in the seed list of a fellow society, a single species of *Anemone* which we desired; after a moment's reflection, we turned the pages until we came to *Pulsatilla*, and there we found the desired names. Without warning, the compiler of the list had followed the Continental trend. That problem was solved readily, but of late there has been a tendency to resurrect long-forgotten generic names, and to list familiar species under these. Only our American species of *Lithospermum* remain in that genus; for the others one must seek under *Moltkia* and even less familiar names. *Rydbergia grandiflora* is now *Hymenoxys grandiflora*, after brief sojourns under *Actinea* and *Actinella*; *Gilia aggregata* must now be sought as *Ipomopsis aggregata*, *G. nuttallii* as *Linanthus nuttallii*—and so on, we fear, *ad infinitum*.

How far Mr. Harkness, in compiling the seed list, will yield to the "new look" in names remains to be seen. We hope that he will at least add parenthetically the more familiar synonyms, but even so one may be reduced to reading every name in a lengthy list (and our proof-reading experience warns that this must be with great deliberation) to determine whether a desired treasure may be available.

* * *

Although Mathematics is our profession, every spring we are faced with an unsolvable problem: why is it that pot plants which have fitted neatly into less than 180 square feet of bench room in the alpine house expand so that, in spite of deletions through death and planting in the garden, they cannot be crowded into a third more space in the plunge beds? At the moment, we are completely baffled: every treasured pot plant (and some less valued ones) must be squeezed into place in the frames, to simplify the work of the conscientious but inexperienced caretaker who must look after things while we are away collecting in the Rockies; it is unsafe to trust in the survival of anything newly set in the garden under a burning July sun. When we give a course in Tensor Analysis next fall, we shall see whether the Theory of Relativity may be involved; but the solution of the dilemma cannot wait till then.

* * *

Accidents will happen in the packeting and naming of seeds: two years ago we absent-mindedly labelled a potentilla growing on a pass south of Laramie

with the name of the rare ranunculad *Cyrtorhyncha ranunculina* which we were seeking in that locality; fortunately we discovered the error when packeting the seeds. The other day came a letter: "'Vancouveria' from the A.R.G.S. seed distribution came up looking like a bulb. I pulled one up this morning and it smells of chives!!!" We are happy to report that our seedlings of *Vancouveria chrysantha* from the same source seem to be true; can it be that Mrs. Klaber stuck a label in the wrong row of her seed frame? However, we are looking askance at various of our babies: "*Androsace spinulifera*" is one of the annual weeds; "*Primula scapigera*," which germinated like a weed, is now displaying the leaves of a candelabra; and there are various more obscure "What is it" pots which may or may not be worth growing to maturity. But that is all part of the gamble: the treasures that do come true from exchange seeds far more than compensate for the occasional fraud.

* * *

Is the professional plant collector in danger of becoming an extinct species? So far as we are aware, only Oleg Polunin still offers shares in the spoils of his all too infrequent expeditions; and this year, if his plans materialized, he is making scientific investigations of Himalayan glaciers, with little opportunity for botanical exploration. We have long begged him to visit Iran or the Cilician Taurus, where there are many plants of extreme beauty which should tolerate American climatic hazards. But the duties of a British school leave him with little opportunity to go to these regions at the proper season for seed. Perhaps the income from such a profession is too limited and uncertain to tempt modern youth, yet Kingdon Ward (with of course some returns from his numerous books), George Forrest, and E. K. Balls seems to have been able to make a living at it. Even with many of the Asian mountains behind various curtains, there still are vast regions available, where grow the choicest of plants which have never graced gardens or which need reintroduction. Is there not some youthful member of our Society who can be encouraged to venture into the wilds and bring back at least a few of the wonderful plants known to us only from the pages of "The Present Day Rock Garden"?

* * *

The slim and indefinite (geographically, at least) reports of the tremendous destruction caused by the recent Chilean quakes, and of the alteration of the topography of the region around Concepción and Chillán, leave one wondering how great has been the damage to the unique flora of the southern Cordillera, and how many species have been annihilated. For that is the country of the rosulate violas, of verbenas that resemble rat-tail cactus, and of many other familiar genera that have developed fantastic forms. Except for Comber's expedition in the 1920's (before we had become interested in rock gardening, worse luck), and another by Clarence Elliott which seems not to have extended far into the hinterland, there have been no recent attempts to make available this fascinating flora other than the introductions of Mrs. Tweedie, some of which were made available in the Seed Distribution of the Scottish Rock Garden Club last year. Several of them are growing here and so far have proved hardy and not inordinately difficult; in fact, *Calandrinia caespitosa* flowered in England in its first season, and made the seed distribution lists. The editor has notes regarding the localities of many of the most desirable species, which he would gladly make available to anyone contemplating a visit to Chile between January and March or possibly April. His own plans for going there have been repeatedly frustrated, until there now seems no possibility of making the trip until he retires—by which time he will no longer have the energy to explore the remote hills.

In mid-July, three months before this *Bulletin* reaches you, we hope to have started on our eleventh plant-hunting trip to the Rocky Mountains. Our companion is again to be Jack Furcha, who although ignorant of taxonomy, last year developed such an eye for plants that after meeting various tall penstemons, he located the utterly dissimilar *Penstemon caespitosus perbrevis* from our sketchy description before we had come upon a plant of it. Never did he, while collecting seed, confuse a plant with one of similar appearance—a born plant hunter if only his interests lay in that direction. Our plans are vague and for the most part subject to change, according to whim and to conditions in the mountains this season. As Frank Rose wrote, every year the mountains grow higher, and the way to them more difficult. We have as yet no plans for visiting new localities, preferring to return to those with which we are already familiar, to meet old friends and see how they are faring, and to see what previously overlooked species we can discover. If our trip is successful, an account of it will appear in the January *Bulletin*, and in the seed list.

P.S. The Rockies suffered the worst drought in many years, and the harvest was slim, but there will be seeds of eritrachium and *Aquilegia jonesii* for the Exchange.

GARDEN MARKER

•
WITH
REMOVABLE ALUMINUM
NAME-PLATE
•

ALL ALUMINUM

NAME HERE

Sturdy, non-rusting . . . just the thing to make identification attractive and permanent. Separate aluminum name-plate is quickly inserted; can be written on in pencil.

Sizes (A) 1" x 3" x 9½"
(B) 1" x 3" x 18"
(C) 2" x 3½" x 14"

Prices Post Paid
Add 10% west of Mississippi River

	A	B	C
100	\$7.50	\$12.50	\$14.00
50	4.50	7.50	8.00
25	2.50	4.50	4.75
10	1.25	2.50	2.75

EXTRA NAME-PLATES,
per 100, \$1.25

YOUTH OPPORTUNITY

901-R FINDLAY STREET
CINCINNATI 14, OHIO

THURMAN'S GARDENS

Home of

Lewisia Tweedyi

Alpines

Western Wildflowers

Rock Plants — Seeds

Novelty Perennials

Catalog on Request

Route 6, Box 2, Spokane, Washington

READ'S NURSERY

Growers of

Rock Garden Plants

for Sun — Shade

Alpines — Dwarf Conifers

(Cash and Carry Only)

388 FOREST AVENUE

PARAMUS

NEW JERSEY

Alpines, Choice Perennials
Nursery Grown Wild Flowers
Rock Plants Seeds
Ground Covers

American Perennial Gardens
P. O. Box 37
Garden City, Michigan

MAYFAIR NURSERIES

R. D. No. 2
Nichols, New York

DWARF CONIFERS
DWARF SHRUBS
HEATHERS

HARDY NATIVE PLANTS

We carry one of the most complete stocks in America of Rare Trees, Shrubs, Broad-leaved Evergreens, Herbaceous Perennials and vines of the Blue Ridge Mountains.

Send for your copy of our FREE catalog covering the most complete assortment of native plants available.

Gardens of the Blue Ridge

E. C. ROBBINS

Box 8, McDowell County
Ashford, North Carolina

RARE PLANTS and SHRUBS

Alpines, dwarf conifers, shrubs and other rare plants from the World's far corners are listed in our free catalogue.

ALPENGLOW GARDENS

13328 Trans-Canada Highway
North Surrey P.O.
New Westminster, B.C., Canada

Primula Juliae Hybrids
Choice Rock Plants
Dwarf Shrubs
Iris

Catalog on Request

Carl Starker Gardens

JENNINGS LODGE OREGON

Colorful

SEMPERVIVUMS

10 Varieties (labeled)
Prepaid \$4.00

Over 100 Different Varieties

MacPherson Gardens



2920 Starr Ave.
Toledo 5, Ohio

Grower of
**Rock Plants, Herbs,
Perennials**
and

Band Grown ANNUALS
in Separate Colors

All Plants for Sale at Nursery Only

SAMUEL F. BRIDGE, JR.

437 NORTH STREET

GREENWICH, CONNECTICUT

GREAT PLAINS PLANTS

ARE WORTHY OF
CLOSE INVESTIGATION

Creeping Phlox, non-climbing Clematis, all-season Evening Primroses, brilliant Penstemons, fine dwarf Asters, Viola montanensis and Nuttallii, a charming dwarf open-sun Mertensia, Anemone caroliniana, Cushion Astragali. Also shrubs, bulbs, seeds.

— Ask for a Catalog —

CLAUDE A. BARR

PRAIRIE GEM RANCH
SMITHWICK, SOUTH DAKOTA

JOIN THE ALPINE GARDEN SOCIETY!!!

PREFERENTIAL TREATMENT IN SEED DISTRIBUTION
(1500 Varieties of Old Favourites, OR
New Introductions Otherwise Unobtainable)

*Quarterly Bulletins Known Throughout The World for Their
Technical Excellence*

AND ALL FOR \$2.80 PER YEAR

Payable to Dr. C. R. Worth, Groton, N. Y.
or from C. B. Saunders

Husseys, Green Street Green Farnborough, England

THE SCOTTISH ROCK GARDEN CLUB



A large number of people outside Scotland find membership of the Scottish Rock Garden Club a source of enjoyment and pleasure. Apparently—for so they tell us in their letters—the Club's Journals (twice yearly) and Seed Exchange are well worth the annual subscription of

10/— (\$1.50 plus .25 handling)

If you are interested in rock gardening, whether as an expert or novice, you are very welcome to join.

J. T. AITKEN, 75 WHITEHOUSE ROAD, EDINBURGH, 4, SCOTLAND
Honorary Publicity Manager

THE ARBORETUM BULLETIN

A Journal of Horticultural Information

Distributed quarterly to members of the University of Washington Arboretum Foundation. For Information—write . . .

ARBORETUM FOUNDATION, SEATTLE 5, WASHINGTON

AMERICAN PRIMROSE SOCIETY

offers

Quarterly publications of the American Primrose Society are as fresh and lively as primroses themselves. As a member of the American Primrose Society you receive these beautifully illustrated booklets spring, summer, fall and winter. They contain accurate information on primrose culture in various parts of the United States, and primrose development, history and romance make delightful reading. As a member you also receive all privileges of the Society, which is international, and a Planting Guide upon receipt of your application. You open the door on a never-ending spring and on lasting friendships with gardeners in all parts of the world.

Mrs. Orval Agee, Treasurer

11112 SE Wood Ave., Milwaukie 22, Ore.

THE AMERICAN PENSTEMON SOCIETY

Cordially invites you to join its growing list of enthusiastic members. If you are interested in Penstemons, you will be interested in the activities of the society.

Write to the Secretary,

Mrs. A. A. Dowbridge

25 Auburn Street, Springvale, Maine
for Full Particulars

BACK VOLUMES OF THE BULLETIN

We have for sale an accumulation of back volumes and individual numbers of the BULLETIN. The available material is listed below.

- VOLUME 1 (6 issues) \$5.00 (limited supply)
Individual numbers 2, 4, 5, & 6
- VOLUME 2 (6 issues) \$5.00 (limited supply)
Individual numbers 2, 3, 4, 5 & 6
- VOLUME 3 (6 issues) \$5.00 (limited supply)
Individual numbers 1, 2, 3 & 6
- VOLUME 4 (6 issues) \$5.00 (limited supply)
Individual numbers 1, 2, 3 & 5
- VOLUME 5 Individual numbers 1 & 6 only
- VOLUME 6 Individual numbers 4 & 5 only
- VOLUME 7 Individual numbers 1, 2, 3, 4 & 6 only
- VOLUME 8 Individual numbers 1, 3, 4, 5 & 6 only
- VOLUME 9 (6 issues) \$5.00
Individual numbers 1, 2, 3, 4, 5 & 6
- VOLUMES 10, 11 and 12 (4 issues) \$3.50 each
Individual numbers 1, 2, 3 & 4
- VOLUME 13 Individual numbers 3 & 4 only
- VOLUME 14 (4 issues) \$3.50
Individual numbers 1, 2, 3 & 4
- VOLUME 15 (4 issues) \$3.50
Individual numbers 1, 2, 3 & 4
- VOLUME 16 Individual numbers 1, 3 & 4

All individual numbers are one dollar each.

A large accumulation of certain numbers permits us to offer ten different numbers, the Society's selection, for \$5.00. (Order the "Bargain Package.")

Postage will be paid by the Society.

Members desiring issues containing articles referred to in the index by volume and page number may obtain the issue, if available, by referring to volume and page number in ordering.

Order from the Secretary. *Please make checks payable to —*

American Rock Garden Society
238 Sheridan Avenue Ho-Ho-Kus, N. J.