

BULLETIN

of the

AMERICAN

ROCK GARDEN SOCIETY

Vol. 14

JULY, 1956

No. 3

.....

SUMMERLAND AND BEYOND — <i>Albert M. Sutton</i>	65
TWO SEDGES FOR THE ROCK GARDEN— <i>Helen C. Scorgie</i>	74
ADVENTURES IN JAPAN— <i>Birdie Padavich</i>	75
SOME ATTRACTIVE ALLIUMS — <i>Peter P. Krieger</i>	78
THE VERONICA TRIBE (<i>cont.</i>) — <i>Will Ingwersen</i>	79
ENGLISH WILD FLOWERS FOR THE ROCK GARDEN — IV— — <i>R. Ginns</i>	83
NORTHWEST UNIT YEARBOOK.....	85
REPORT OF THE NORTHWEST UNIT — <i>Helen Morris</i>	86
TWO REASONS FOR ROCK GARDENING — <i>G. G. Nearing</i>	87
NOTES FROM CALIFORNIA — <i>Virginia Stewart</i>	90
ARABIS "SPRING CHARM"— <i>CRW</i>	91
OLD FAVORITES — <i>Madeline Modic</i>	92
SALMAGUNDI	93

DIRECTORATE

BULLETIN

Editor Emeritus

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

Editor

C. R. WORTH, Groton, N. Y.

AMERICAN ROCK GARDEN SOCIETY

Honorary President.....MRS. CLEMENT HOUGHTON, Chestnut Hill, Mass.
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
ARTHUR R. VIRGIN

MRS. HARRY HAYWARD
BRIAN O. MULLIGAN

MISS ELIZABETH GREGORY HILL
MRS. COULTER STEWART

Directors—

Term Expires 1956

MRS. MORTIMER FOX MRS. J. M. HODSON MRS. CLEMENT S. HOUGHTON
MRS. DOROTHY E. HANSELL DR. E. T. WHERRY

Term Expires 1957

KURT W. BAASCH MRS. M. J. FITZPATRICK BERNARD HARKNESS
MISS ALIDA LIVINGSTON HENRY S. FLEMING

Director of Seed Exchange

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

REGIONAL CHAIRMEN

Northwestern.....DR. J. D. BARKSDALE, 13226 42nd NE, Seattle 55, Wash.
Oregon Subgroup.....FLOYD W. McMULLEN, 5420 SW Alfred St., Portland, Ore.
Western.....MRS. COULTER STEWART, 155 Broadmoor Ave., San Anselmo, Cal.
Rocky Mountain...MRS. G. R. MARRIAGE, 125 W. Monroe St., Colorado Springs, Colo.
Central.....MRS. GLEN FISHER, Rt. 3, Box 168, Oshkosh, Wis.
Lakes.....ROBERT M. SENIOR, 1605 Union Trust Bldg., Cincinnati, Ohio
North Atlantic...HENRY S. FLEMING, Grandview Place, Coytesville, Englewood, N. J.
New England.....STEPHEN F. HAMBLIN, 45 Parker St., Lexington, Mass.
Maine Subgroup.....MRS. HARRY HAYWARD, Scarborough, Maine

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 Avenue, Ho-Ho-Kus, N. J. Address manuscripts and other matter relating to the BULLETIN to C. R. WORTH, Groton, N. Y.

BULLETIN

of the

AMERICAN

ROCK GARDEN SOCIETY

C. R. Worth, Editor

Vol. 14

JULY, 1956

No. 3

SUMMERLAND AND BEYOND

ALBERT M. SUTTON, *Seattle, Washington*

SINCE EILEEN, my garden-happy wife, and I are members of a rock garden society it seems quite natural that we should have a rock garden. We do have one of sorts, one with a heavy clay soil and with it we encounter problems galore. When we grow weary of wrestling with these problems we find it quite simple to drop our garden tools and our cares and spend a week-end in the mountains that are so easy to reach from our Puget Sound home. This time we chose to go southeast to Mt. Rainier in the Cascade Range.

To a great many people Mt. Rainier is no more than a beautiful and mysterious phenomenon on the far horizon. Many others follow the winding highways, when summer comes, to Paradise Valley or Sunrise Park where pavements end and trails begin. There most of them congregate in the shadow of the steep-roofed inns to view the "Mountain that was God" with touristic eye and clicking camera. Some even venture a way on the trails but soon return. To these people the great mountain is not to be too closely approached nor is it their desire to linger overlong where such majesty dwells.

Somewhere in their collective sub-consciousness a warning is sounded. They dare not linger lest the spell of the mountain be upon them. They must hurry back to their urban homes, to their crowded streets and teeming buildings, back to the meager pleasures and uninspired amusements that loom so large in the scheme of their everyday lives. Life for them, of necessity, must contain much that is ordinary, dull and sometimes sordid and that such a life may not become insupportable they have encased themselves in a synthetic contentment that is not proof against the shattering influence of great beauty or transcending glory. So in their swift machines they flee lest the great mountain pierce the armor of their compacency with the sharp arrows of discontent and so claim them for its own. Once claimed they may never escape.

Long ago Eileen and I fell under this spell and we have not escaped nor have we wanted to. It brings us back to our mountain every year and many times each year. We seldom go to the crowded areas but rather seek out the lonelier places where the snowy peak is our only companion and where a wonderful and a truly personal religion can be nurtured, for not without reason did the understanding Indians call this shining one the "Mountain that was God."

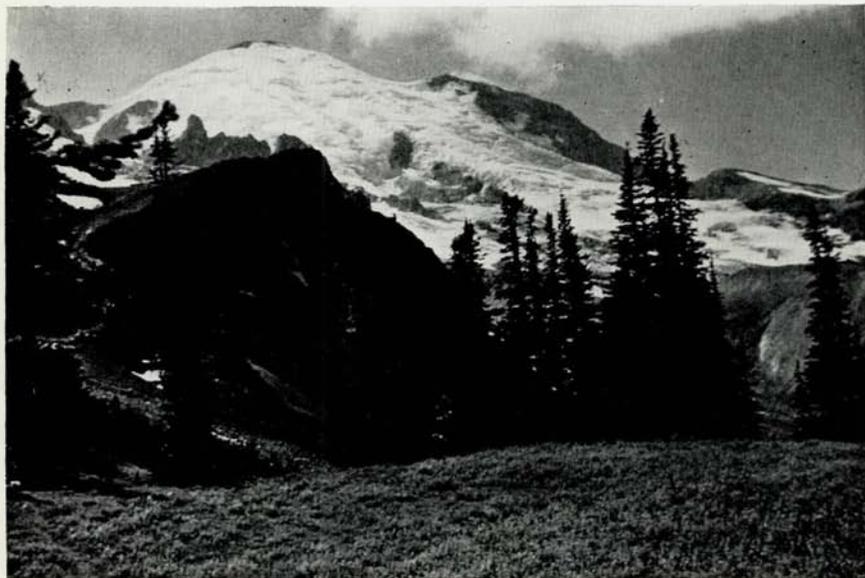
Although much has been written about Mt. Rainier it is possible that you have not read of a lonely bit of it lying well within the park but east of the mountain so I will tell you of our night at Summerland and the following day at Panhandle Gap. We left our Seattle home before noon on Saturday and finished the ninety mile drive in the early afternoon. We parked our car near the bridge over Fryingpan Creek and shouldering our packs started up the Wonderland Trail which roughly follows the creek as it curves around the flank of Goat Island Mountain. Ahead of us lay four miles of broad forest trail of easy grade and then a half mile of switchbacks. Towering cliffs across noisy water, several thunderous waterfalls, numerous forest flowers and the lovely pattern of sunlight and shadow dancing along the path kept us entertained and before we knew it we were out of the woods and well into a sloping subalpine meadow.

The trail was deeply worn and at times the thick trailside growth of false hellebore, *Veratrum eschscholtzii*, interspersed with *Aquilegia formosa* and various bright hued Indian paint brushes, obstructed our view. It was like walking through a cool green, sky-roofed tunnel with the walls at eye level frescoed with the tassels of hellebore, each tassel a pendant cluster of green flowers exquisitely wrought. Then the trail straightened and we were looking directly at the white dome of Mt. Rainier shining in the afternoon sun. We reached the switchbacks and rested for the stiff climb ahead. Trees were around us again and in the sheltered places *Erythronium montanum* were massed like an assemblage of the devout with heads all bowed. The zigzags were soon conquered and then we were at Summerland.

Summerland is an open park-like knoll where the flowers come late to the mountain and where it is best to visit in August rather than in July. Emmons, one of the great glaciers, is not far away and several smaller ones are even closer. From Summerland the mountain appears as a truncated cone with very little rock in evidence except on Willis Wall and where, nearer to us, Little Tahoma, a jagged crag riding piggy-back on the mountain's shoulder, thrusts its sharp crest over 11,000 feet into the sky. Below it smaller satellite spires and spines flash like rocky fins above the rough surface of snow and ice that is Rainier's eternal mantle.

Nearby a massive escarpment descends from Little Tahoma in a series of ice-ridden ridges and broken hills. Minor glaciers force their way truculently between wrathful cliffs from which great fragments of rock are cast down occasionally to the glacier surfaces and the talus slopes below where they bound and roll and come to rest in the lupine fields at the foot of our little Summerland knoll. Across on the cliff tops the raw ice of age-old glaciers, laid bare by recent avalanche action and exposed to the burning caress of the sun for the first time in countless years, spills small waterfalls down the cliff faces to be lost in the long plunge and disappear as wind-blown spray amid the rubble where the talus slopes meet the cliffs. Free to frolic once more after their long imprisonment there is soon a gathering of these dispersed bits of moisture in the upper talus and the far-spreading slopes become the playground of many tiny rills that rush gaily between the rocks and the banks bordered and sometimes covered with lovely chartreuse moss.

These rills merge into boisterous rivulets that leap over the rock masses in foaming cascades and in their hurry soon leave behind the green-gold moss to run the rosy gauntlet of the *Mimulus lewisii* legions that border the banks in profusion and mind not at all the icy water so gleefully splashed on their lush foliage. Soon in growing volume these brooklets sparkle past the foot of our knoll to meet and embrace other happy waters until Fryingpan Creek is born and starts on its journey to Puget Sound and the sea.



Mt. Rainier from our Summerland camp.

Albert M. Sutton

Arriving at Summerland our actions were automatic. Dropping our packs we rushed to find a vantage point from which the mountain and its surroundings could be viewed. Then the long and satisfying look at the great peak while strange emotions stirred within us. Our eyes, becoming restless, followed the skyline to Little Tahoma and then down the ridges to the falling water on the cliffs. Soon they picked up the new-born rills and followed them to our feet. Lest we had missed something we let our gaze travel in reverse. From the hurrying water below us our eyes moved up the laterally rolling slope where the ground between each rivulet was a field of solid blue where *Lupinus subalpinus* spread its heavenly cloak, then farther up the slope where the pale green moss softened the harsh jumble of rocky debris and accentuated the very dark green of a scattering of alpine firs, *Abies lasiocarpa*, that had reached there the limits of its range; on up to the foot of the high cliffs flounced with the grotesque shapes of snowbanks yet unmelted; up the cliff faces half hidden behind their veils of glistening spray and on to their caps of snow; up the ridges to Little Tahoma and to the glowing mountain itself. Over all the intense blue sky and in it a lonely cloud blushing in the slanting rays of the sun riding down its western arc. Color, movement, solitude; the laughter of playful water and a great excitement — and peace.

Perhaps you think that the two are incompatible? If so, it is that you are not aware of the alchemy of which Mt. Rainier is capable. To be filled with a great and pulsating wonder engendered by the grandeur all about; to tremble with the realization of a vast capacity to receive and react rapidly to impressions following one another in bewildering number and variety; to lift one's eyes to the beauty of the mountain and the shining sky; to fill one's lungs with the keen alpine air; to thrill to the aeolian music in the trees; to stand tall and straight with arms outstretched and to feel welling up within one an exaltation so great that one must shout; to reach the bursting point with the pure joy of life in one of life's purest moments: all this is excitement. To experience such a spiritual

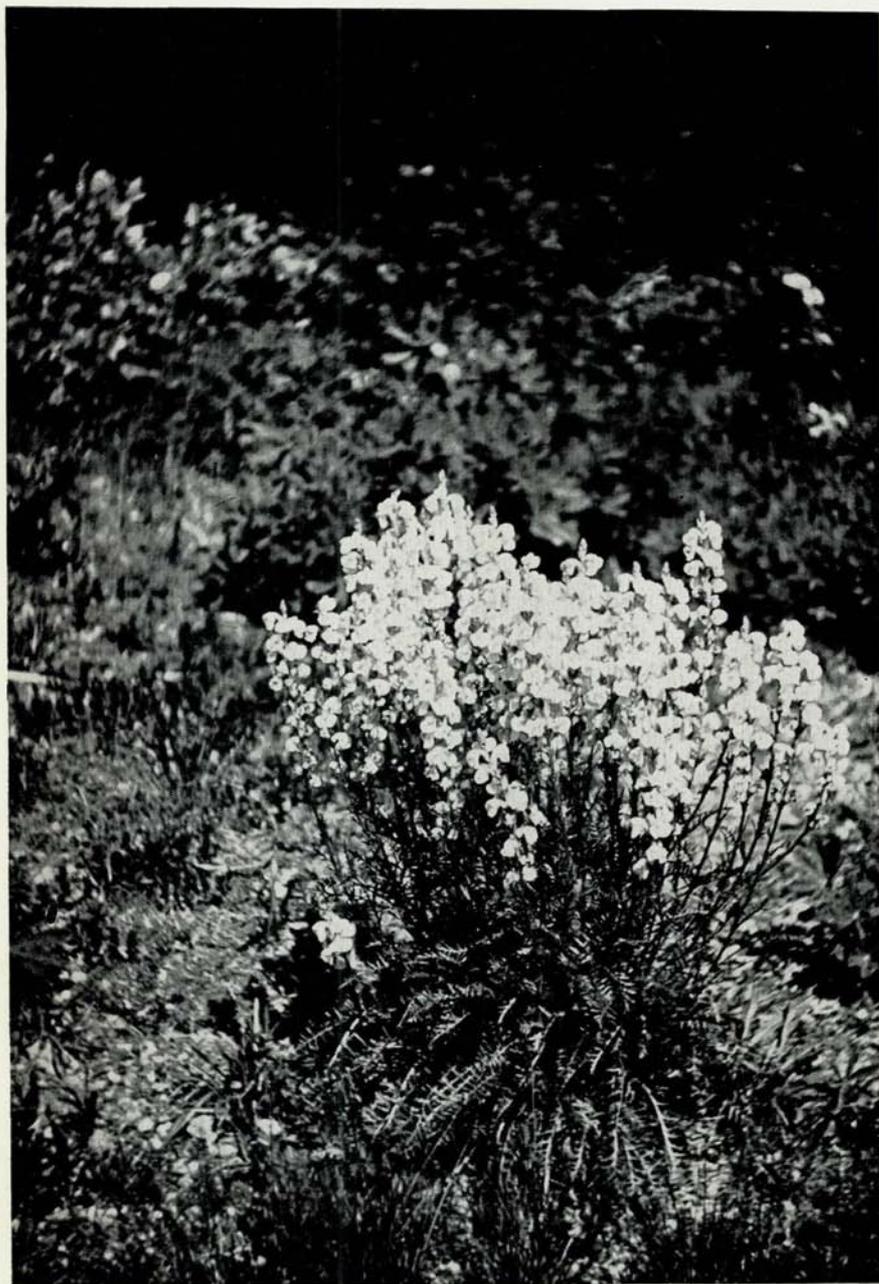
uplift is to enter a little way into the Kingdom of Heaven and when one enters there, even for a moment, all earthly emotions subside. Excitement gives way to wonder and a warm inner glow and then there is peace. A fine symphony, an unselfish act, the song of the hermit thrush at dusk and many other wonderful things there are that have the power to lift one out of this world for a moment. Mt. Rainier has this power, the power to lift you to the heights if you will let down the bars of your inhibitions and yield yourself to its spell.

We wanted to enjoy a full day on Sunday so it was early to bed for us. We dashed through a hasty supper and spread our sleeping bags in the open away from the little grove of alpine firs so that we could have an unimpaired view of the mountain during the long twilight and later when the moon was high. While preparing our meal we had time to observe the plants and flowers that abound at Summerland. Many of them were the usual subalpine meadow flowers that grow in such profusion at this altitude as to girdle the mountain with a mile-wide garland of color. In many places it is necessary to walk carefully lest some lovely blossom be trampled under foot.

The most abundant flower was *Lupinus subalpinus* in great sheets like fallen bits of sky star-dusted with arnica, castilleja and agrostis. Where the lupine had not taken over other plants had their chance. *Valeriana sitchensis*, of whose fragrance I have ever been doubtful, held its clustered head above the others but it was not as interesting to us as were the odd species of pedicularis scattered about. The most attractive was *P. contorta* in large clumps with clear cream flowers above feathery foliage. Others we saw were *P. ornithorhyncha* and *P. surrecta* with their odd shaped beaks, the first one like that of a bird and the other resembled an elephant's head with thin trunk upraised. Of course, there were the ever-present *Polygonum bistortoides* waving their bottle-brush heads in some private breeze of their own. We have noticed that air movements so slight as to leave other tall flowers motionless will set these knotweeds dancing wildly. In the rather scanty grass were many tiny *Veronica cusickii* of a deeper blue than the lupine and with them were occasional happy-faced plants of *Ranunculus suksdorfii*.

Eileen and I crawled into our sleeping bags long before dark. We watched the sun disappear behind the mountain in the vicinity of Willis Wall while we watched a little affectionate cloud snuggled down around the white crest to form a dainty nightcap and as twilight deepened it shone with a pink radiance as the sun touched it with his last rays. In our north country twilight is a lovely and a lingering time and snug in our resting place among the lupines we had but to lie still and wait for the wild ones to make their evening appearance. Across the way in a lush half acre a large marmot with a carrot-colored back made a leisurely meal from the choicest plants and since there were none about to frighten him we did not then hear his shrill whistle. Two small bucks with mere suggestions of antlers browsed a little way from us and minded us not at all. Small birds were busy about their evening chores and over in the grove where the shelter cabin stands a squirrel was scolding. On a higher slope and silhouetted against the ice falls of Emmons Glacier a sizable bear stopped to scratch himself and then shuffled out of sight over the ridge.

We had hoped to see mountain goat on the higher ridges but in this we were disappointed. While watching for them we talked of the alpine plants that we knew grew up there close to 8000 feet in elevation. Where the strong winds had blown the snow away and laid bare the rock-strewn patches of pumice there were such interesting plants as the little mustard member, *Smelowskia ovalis* and the ground-hugging *Spraguea multiceps* which is usually near by and is a small relation of the lewisias. It has a very neat habit for from the central flat mass of succulent spatulate leaves radiate inch-long, prostrate peduncles, like spokes in a



Albert M. Sutton

Pedicularis contorta in the meadows.

rimless wheel, and crowded at the end of each a dense roundish head of tiny pink flowers. This plant is well named pussy-paws. There, too, would be the dainty golden aster, *Erigeron aureus*, a delightful foil for the quantities of another flatty, *Lupinus lyallii*, whose blue and gray mats are exquisite when seen in the early morning for then each silky gray leaf holds within its palmate grasp a moist diamond from which the sunbeams dance. We had not planned to visit these pumice slopes this trip as we had far to go to reach the Gap and return to Seattle all in one day. So while we talked of these little friends of ours twilight became dusk and the stare came out, at first one or two and then very soon we lost count. Night had spread its dark blanket over us.

To lie on one's back, snug and warm, in an open mountain meadow on a fine summer night and make friends with the bright constellations as they swing in stately splendor across the sky is one of the rewards for him who seeks the lonely places. We were doubly fortunate for since it was August there were showers of shooting stars to entertain us. The mountain seemed to have retreated into the distance until it was merely a dark bulk that blocked out some of the western stars. The last thing that I remembered before sleep had its way with me was the silent passage of a shadowy shape a few feet over our heads as a large owl went about his nocturnal business.

I am grateful to the tiny creature, furred no doubt, that ran across my shoulder a few hours later and caused me to waken. But for it we might have slept the whole night through and so missed an experience so lovely that even the most enchanting dream would seem dull by comparison. I sat up and found myself in a different world; a world of silence but not silence exactly; certainly not the loud and uneasy silence that follows the cessation of all accustomed sounds; rather a stillness as of life suspended for a bit. There was no visible movement and no sound other than the unconsciously heard basic sounds of nature asleep. The night wind had succumbed to its own lullaby in the tree-tops and no night bird called. The tumbling streams had hushed their laughter for the freezing night at those higher levels had locked up the source of their noisy waters. The golden lantern of the moon hung serenely in the sky and all of our little world glowed softly in the pale radiance. A luminous ground mist shrouded some of the landscape but never seemed to change shape or move and never was more than a few feet high. To look down on the mist where it was below us was to look down on an opalescent sea whose restless tides knew no motion. For a little while there was peace.

I had awakened Eileen and it was her gasp of astonished delight that caused me to turn and look at the mountain. I had been so enchanted with the moonlit scene that I had not yet thought to look at Rainier but once the impact of its regal beauty had been felt all else was forgotten. The moon had worked her magic and the white dome glowed and scintillated in her serene light. Lost was the mountain's remoteness of the darkening twilight; no longer lumping loutishly in the dull distance like some couchant beast. Nor did it stand in kingly dignity on its dais of flower-decked foothills, as it had in the late afternoon, wrapped around with its royal garments of ermine touched with golden sunlight. In some mysterious way the mountain had moved closer to us. Intimate now, pale, softly aglow, with an allure that was insistent though not demanding; perfect in the obscurity of detail, luscious in outline against the night sky; a queen, with stars for a diadem, who had lost her way while sweetly dreaming and had wandered into our spacious resting place. We could but adore her. We could but wonder. How could such perfection exist by night and how could it be reconciled with that which the strong light of day had so brutally revealed?

In the daylight with the sun shining on the mountain the details of the unceasing strife were visible and the terrible havoc wrought in the long ages past was starkly evident but in the kindly moonlight all signs of the mountain's slow disintegration were blotted out and the grievous wounds that time and the elements had inflicted were hidden beneath an outward semblance of completeness and well-being. As I watched I thought of the great patience and fortitude with which the harassed peak bore its centuries-old affliction. Born in the dim past of cataclysmic violence and nurtured to its full stature in a changing world it emerged a massive cone that reached an elevation of some 17,000 feet above sea level and at least 11,000 feet above the immediately surrounding foothills. No wonder it assumed the aspects of majesty for it was certainly the lord of a wide domain.

But it was also the instant and unceasing prey of the elements. Every phase of nature in that raw and violent world had its part in the attack. Heavy snowfall locked on the mountain by awful cold, released by the summer's heat to melt and flood in torrents of rushing water capable of carrying the mountain, grain by grain, to the sea. However winters were long and summers short and the snow gained in depth and its weight exerted pressure and so ice was formed to be pushed downhill by the weight of more ice forming above it. Thus was formed the great system of glaciers, an enormous monster-like icy octopus sprawling over its victim's defiant body; its own awful mass atop the peak sending its long torturing tentacles down the stricken mountain's sides to wear away its substance in never ceasing attrition, to gouge deep gashes in the rocky flanks and grind the adamant flesh to powder for the milky streams to carry to the lowlands. I wondered; how can a substance as unstable as ice, which ceases to exist in the presence of heat, wear away rock? How can a mountain of rock be destroyed by such an inconstant thing as ice which has no being except in the presence of low temperatures?

I thought: Mt. Rainier has been and still is a volcano and although inactive must yet contain within itself a weapon which, if used, could in a very short time destroy the leach-like tentacles fastened to its sides. The weapon of internal fire, smoldering now deep within the mountain's secret heart, could, if whipped into fury, spew forth a seething molten mass to rampage down the mountain's slopes to route the icy beast. What a scene of wrath and destruction that would be. But the mountain has learned wisdom for once in the dimly recorded past when full realization came to it that it was being destroyed, the tortured giant, in a fit of outrage, erupted angrily and for a time was free. But this understandable outburst cost Rainier its loftiest 3000 feet and when the terrible avenging fires had burned themselves out the dreaded destroyer crept stealthily back and soon the slow process of destruction was in full swing again and, I suppose, will continue into the future until the great snow peak has been spread out over the lowlands or washed into the sea and all that will be left will be another high plateau. Perhaps the mountain senses this now and has accepted its fate and no longer hates or is fearful of the savage ice rivers forever at their terrible work and realizes that they are but the tools with which the all-powerful elements and tireless time work their will and in the end bring all things, even great mountains, to some unknown common denominator.

Morning found us up and about and a bit shame-faced that we had surprised the mountain in a revealing moment and delved too deeply into its hidden life. The sun was on the upper slopes and then by the time the slanting rays had reached us at Summerland we were through with breakfast and ready for the trail. We took the Wonderland Trail again in the direction of Panhandle Gap. As we crossed the several streamlets that converge at the foot of our knoll we checked the plants that had found the moisture and splashing water to their

liking and so had crowded into the tiny vales right up to the water's edge. The most abundant and conspicuous was, of course, *Mimulus lewisii*. Of the smaller things we found *Saxifraga arguta* and *S. aestivalis*, the former having two yellow spots at the base of its white petals. There were patches of the leathery-leaved *Leparrhena amplexifolia* and small areas were alight with the white flowers of *Caltha leptosepala* while away from the streams a bit were plants of *Gentiana calycosa* not yet ready to bloom and several fascinating pink stars in the grass that were *Kalmia microphylla*.

The trail led past the marmot's green pasture and into a rocky defile where the marmot colony lived and we could hear their shrill warning whistles as we approached. Two sentinels went underground from their lookout rocks as we moved closer but several youngsters paid no attention to us but went on with their rough and tumble play though we passed within fifteen feet of them. Soon we reached a gentle slope where the water from the cliffs spread out in the moss and did not bother to make channels for itself. Here were marvelous rock and water gardens that gloried in the morning sun and were grateful in the afternoon for the lengthening shadows cast by the cliffs.

And here the master gardener had taken the rocks as he found them and let the wilful water have its way. In great broad sweeps he spread the delicate moss and decorated it with dazzling sequins of *Mimulus caespitosus*, in many-flowered clumps, to catch and reflect the sun's gold. Tiny pink stars in the moss were *Epilobium fastigatum*, or so we thought, and as accent points by the miniature waterfalls stood clumplets of sedge with waving heads of brown and tan chaff. *Heuchera racemosa* he used to outline the larger rocks with pale cream embroidery. These sedate and aristocratic plants seem to dislike gathering in crowds but prefer to spread out in an irregular line following the upward curves of the protecting rocks like pilgrims ascending the mountain to some holy place.

Then, because there was so much that was yellow and gold and chartreuse and so much greyness in the rocks, our gardener found it necessary to provide some relief and so he persuaded some of the *Mimulus lewisii* plants to forsake the lush stream banks below and climb to sterner elevations. These dwarfed rosy masses brought just the right contrast to this lovely slope. With reluctance we left this enchanting place and passing around a rocky promontory we saw ahead of us a low gray wall of rock sharply inclined which served as the far boundary of a secluded dell the floor of which was a smooth mossy carpet seemingly devoid of other vegetation. As we drew nearer we saw that it was a special kind of place; one that Marco Polo might have chanced upon during his first visit to Cathay, for down the golden slope there walked in austere dignity, or so it seemed, a diminutive mandarin clothed in robes of green and rose and followed closely by a dutiful wife in similar raiment shimmering in the sunlight.

One should take two sets of eyes and ears to the mountains: One set, the useful set, with which to see and hear the needful things; the exact place to set one's foot; the easiest grade up a slope; the crash of thunder in the distance; the flowers to check and try to identify; the rising of the wind and the direction from whence it comes; the erratic flight of a ptarmigan; the interplay of sun and cloud and shadow; the sudden roar of avalanching rock and snow. These are the normal things that must be seen and heard and heeded if one's sojourn in the high country is to be safe and comfortable and interesting. The other set of ears and eyes must register only in terms of make-believe; must react to that inner urge, stronger in some than in others, to live in the presence of beauty and so to translate normal sights and sounds and situations into fantasy; to harmonize all color, all sound and all movement; to give life and meaning to inanimate things; to create situations of tenderness and nobility and in so doing feed one's

soul with inspiration self-instilled from these many impressions both real and fancied.

Our mandarin and his lady were in reality but two lonely plants of *Oxyria digyna* growing quietly in the solitude of their mossy home. Perhaps you can see the advantage of that second set of eyes. We went on around the side of a seemingly barren hill and down in a small swale and all was rock and of soil there seemed none at all so it was with astonishment that we saw flowers in full bloom and quite happy with their lot. A pure ground rock diet seemed to suit *Sedum divergens* perfectly for its yellow flowers were numerous and brilliant but it was the splashes of rose-crimson sprawled on the cliff faces that claimed our attention where *Penstemon rupicola* hung its gorgeous banners. Another *Penstemon* sometimes perched proudly on a rocky throne and sometimes prostrated in the dust at the trail's edge was *Penstemon menziesii*, a small-leaved ground-hugger with many enormous two-lipped trumpets nearly hiding the foliage. In this plant the color varies, some of the purples are a bit torrid while some of the lavenders and blues are quite good. There were the usual number of *Compositae* about including *Haplopappus lyallii*, often mistaken for *Erigeron aureus*, and *Aster alpigenus* as well as some very tiny neat everlastings.

We skirted the edge of a glacier-fed pool which glistened at the foot of Fryingpan Glacier and then we had to cross a sloping snow-field and in so doing we followed the easy grade marked out for us by fairly fresh and unpleasantly large bear tracks. Soon we reached the snow-free saddle that is called Panhandle Gap. The view to the southeast was dominated by 12,307 foot Mt. Adams and far on the southern horizon one could see Mt. Hood (11,225 feet) in Oregon, that is if one were good at distinguishing mountain peaks covered with snow from snowy clouds arranged in peaks. We found flowers on the saddle that we had not yet seen on our trip. The elevation was 6900 feet which on Mt. Rainier is well into the arctic-alpine zone.

Panhandle Gap is open to the sun and wind-swept so it seemed natural to find a dainty windflower, which we thought was *Anemone hudsoniana*, in abundance. We were almost fooled by *Eriogonum pyrolaefolium* which tried to pass itself off as a spraguea. In sheltered places we found *Polemonium elegans* and on the northern slope of an adjacent hill was *Dryas octopetala* whose little oak-like leaves have always delighted us. On the other side of this hill in a terraced meadow where some snow yet lingered we came upon *Lewisia triphylla* which is not a very startling plant but it was new to us. There, too, was *Saxifraga tolmiei* whose fat beady leaves would lead one to believe it was a small-leaved sedum. *Lutkea pectinata* curled its lacy foliage lovingly about the larger rocks and waved its spirea-like flower heads invitingly to the alpine insects.

It was very pleasant on the sheltered side of the gap and we rested there in the sun and if the truth were known we may have napped a bit. Then realizing with regret that it was time to start back we decided to make fast time to Summerland where we would resume the packs we had left there and then take it easy from there to the car. How swiftly the back trail unwinds itself when most of the way is downhill and there are snowbanks steep enough, but not too steep, to make glissading possible. Whenever we could trust our feet to keep the trail without the help of our eyes we watched the changing picture of the white mountain for we were moving steadily toward it. We noticed that the wind had changed and that dark clouds were rolling in from the southwest where the ocean brews its summer storms.

The mountain was still in sunlight but gray banners of mist were beginning to drift out of the valleys and obscure parts of the lower snow fields and by the time we reached Summerland the summit was playing peek-a-boo with

us, sometimes invisible, sometimes emerging bright and clear and sometimes seen but thinly through the shifting mists. We stopped long enough for some crackers and cheese then took up our packs and hurried down the switchbacks and as we entered the forest trail the clouds had won their battle with the sun and we were in a twilight world.

Forest paths in our land of tall trees are always soothing and peaceful after the sun has vanished and it is a delight to follow them even though one is tired from a long day's tramp and has that let-down feeling that comes when homeward bound from the mountains. The usual serenity of the evening forest was with us at trail level but the primeval silence was not there for the wind had found the tree tops and the music of their meeting was to us a symphony of stately grandeur in which the woodwinds predominated and the main theme was oft repeated.

It is a theme of strength, restrained but free, and of yielding to that strength, yielding only as much and as long as is necessary; a theme of the rightness of elemental forces and the Great Power that controls them. It is a theme that Eileen and I carried with us to the city where, like the rest, we must dwell for a while and carry out the tasks that are appointed to us. But the spirit of the mountain, the "Mountain that was God" sustains us and in our hearts is the wild music and in our minds the beauty we have seen.

TWO SEDGES FOR THE ROCK GARDEN

HELEN C. SCORGIE, *Harvard, Massachusetts*

ONE DOES NOT ORDINARILY THINK OF sedges as garden plants but some of them do form neat, attractive clumps and are ornamental both in leaves and flowers. In them, one's enjoyment is of the whole plant and they will be of little interest to the gardener whose main interest is in masses of bright color.

Most of the sedges are wet soil plants and their garden use is in bogs and along the edges of brooks and ponds. For such use, the gardener has only to search his local wet spots to find endless varieties of much interest. But the two of which I should like to speak, are plants suitable to the rock garden though both like some shade and moisture. Neither is a bog plant.

Fraser's sedge, *Cymophyllum fraseri*, is found over a very limited range from Virginia and West Virginia to North Carolina and Tennessee in rich woods and along streams. Even in this limited range, it is not common. It is an extremely ancient plant and primitive in its structure.

It makes a most attractive rosette of pale green leaves with golden lights in them. These are about six inches long and an inch wide and have undulating edges. The whole plant is pleasing to the eye in both form and color. In late April, it sends up a stalk surmounted by a milk-white flower head which might remind a lay gardener of a composite. This stalk is short so that the flower head nestles in the bright-tinted leaves. It has been perfectly hardy here and remains green all winter. It is growing in dampish leafmold in mottled shade.

Another, very different, but also a pleasant garden occupant is *Carex eburnea*. It hails from the far north, coming down into Vermont along calcareous ledges. But in my garden, it is happy within a few feet of its tow-headed southern cousin, although it is made happy with much lime. It is also compensated for the hotter summers by increased shade while its neighbor has increase of sunlight. It is a very different looking creature, forming a dense clump of thread-like leaves which slim stems are topped in summer by tiny dark heads.

ADVENTURES IN JAPAN

BIRDIE PADAVICH, *North Bend, Wash.*

IN THE SPRING OF 1954, my husband, Mr. and Mrs. Francis Sprague, and I had a wonderful trip to Japan. It was largely impromptu, with no carefully laid out and professionally supervised tour bureau making everything easy for us, with no meetings with garden clubs or help from their members—and with no knowledge of Japanese. We had expected to find that many of the people could speak English, but if they do, it is in other places than the ones we visited.

From San Francisco we sailed for the Philippines in a Norwegian freighter, and stayed in Manila for five days. There we hired a car and guide and drove around the country. It was very warm in the lowlands, 100 to 110 degrees most days and nights, so we left the hot plains and went up in the mountains, where we found much of interest in both the native villages and the plant life. As we travelled through the hills we saw quantities of small orchids. In the evenings, the natives in the market places sold long sprays of small orchids very cheaply, while one could buy lovely dark red cypripediums, freshly dug in the hills, for fifteen or twenty cents. I always had a room full of these beauties.

Our next stop was Hong Kong, where we found wonderful hand carved things. But the plant life was not there, the hills were of stone, as bare as if scorched by fire, with not a tree in sight. Our ship was there only two days and we had no time to go into the farming country. As we left Hong Kong the weather turned cold and stormy, and by evening we were in typhoon Anita. For two days we rolled and tossed; the sea came over the bow and ran full length of the ship, lapping up over our stateroom windows. I asked myself often in those two days what I was doing out there, and made some rare promises, if ever I got my feet on dry land again.

The sea calmed as the typhoon hit Formosa, and we went on to Japan. Our passage was for Yokohama, but first we had to unload freight at Nagasaki. We picked up our pilot at Kobe, and then found that we had to go to Osaka, where we lay out in the harbor four days before the ship could dock. (Things get rather muddled in that country.) We left the ship at Osaka and went to Tokyo by train; that truly was an experience, our first of being on our own without an English-speaking person around. Osaka is the third largest city in Japan, and at the depot that day there were only a few thousand people, say around thirty thousand, pushing and shoving. Everything was written in Japanese, and we had no idea of where to go to buy a ticket or to board a train. We asked at all the ticket windows and read our guide books, but no one understood us—they just giggled. Finally a hotel porter, who could understand a little English, came along and helped us get our tickets for Tokyo. Our car was waiting for us there, and we wanted to come back by car and explore the region.

The country was lovely as we followed the ocean, and then over the mountain where azalea and wisteria were in full bloom. Azaleas lined the railroad banks and bordered the rice paddies. *Magnolia kobus* and another tree which I thought was the dove tree grew in the ravines. Japan is very rough and hilly, and here in the southern isle all is under cultivation: forest trees have given over to tea plants and mulberry orchards.

We saw lovely small gardens sandwiched in between houses, and later when we stayed overnight at inns in the country we would have tiny gardens outside our windows. Often in the bath there would be a lovely garden of stones and shrubs. Always in our rooms we had a beautiful flower arrangement, although there was not a stick of furniture. Along one side of the room there was a series

of shelves, on which were dolls in glass cases, pottery vases, Buddhas—treasures handed down from generations past.

We left Tokyo and headed south towards Mt. Fuji. As we crossed the mountains, farms gave way to cultivated patches of timber. The road was rough, often one way, and very narrow. We stopped often to take pictures, and I looked the vegetation over. Azaleas grew everywhere, all kinds and all colors; corydalis too, in shades of deep purple to bright pink. Anemones, which my Japanese wild flower book lists as *A. keiskeana*, carpeted the roadsides with white and deep blue. Along the brooksides were *Iris japonica* together with ferns, of which I'd often count five or six different ones in as many feet. A lovely little blue gentian grew along the roadside and in the lawn at our cabin at Mt. Fuji. The cherry trees were just coming into bloom in this mountain valley and the slopes were pink with cherry and prunus, while snow was not far away.

Mt. Fuji Hotel had large plantings of azaleas and of a white menziesia, while many forms of maple and pine grew around the hotel. We had a cottage down by the lake, which we reached by passing through a wonderful woods, in which grew lilies, anemones, gentians, violets, phyllodoce, corydalis, epimedium, and quite a few things I was not familiar with. Wisteria grew everywhere over the tree-tops and along the stone walls. The hotel had at least a hundred Bonsai trees, of maple, pine, wisteria, and azalea. The American government had taken over the hotel as a rest camp for its armed forces in the Far East. We were there on May 1, Communist day in Japan, and were given notice to stay within the hotel grounds, with the U. S. forces, as the native village nearby was communistic.

The weather in Japan in spring is like that of the Pacific Coast—it rained continually. We had raincoats along, so the rain did not bother us. Leading from the hotel to our cottage was a stone wall following a twisting old trail, and in each crevice of the wall was some choice plant: azalea seedlings, ferns, creepers, lots of tiny plants just coming into leaf. Veronica and geraniums in different colors and leaf-forms were plentiful. Small blue grape hyacinths and a small white lady's slipper orchid grew on the damp hillsides. We walked miles over the bare hills back of the hotel, always with a group of school children along. When we stopped to admire a flower they all crowded around and admired it too. Most of them wore well-padded kimonos, as it was cool up in this mountain valley, and their homes had no heat.

Our road maps showed a road around Mt. Fuji, and down to the coast on the other side, so we decided to travel over it and see more country. When we gassed up the next morning the man told us it was a bad road, but we decided to take it anyway. As we left the village the women and children were going out into the hills to look for wood. We passed large groups cutting brush on mountain slopes which were already as clean as a park. About ten miles from the village the road became very narrow and rough. We had left with a scanty breakfast and soon all were very hungry, for toast and coffee do not go very far when one is constantly in and out of a car fixing roads, rolling stones and filling holes. The country was very rough and hilly, and here azaleas grew into trees ten or twelve feet high in lovely shades of lavender and pink, while *Pieris japonica* made huge trees fifteen to twenty feet high, in full bloom and a wonderful sight. Oxalis, cornus, trilliums and ferns grew in the shade, but the open slopes were bare. In the distance we could see huts with children playing in front of them, halfway up the slopes, and we wondered what they were for, and what the people there did for water.

We traveled thirty miles that day, and late in the afternoon, starved to the point of eating anything, reached a lovely valley. The houses there were

thatched with straw, on which grew lovely iris and ferns. This was real farming country, with everyone busy doing all the work by hand: getting the rice paddy spaded up, drying mushrooms, plowing the mulberry orchard. This is silkworm country, and every house has its mulberry trees or small spinning factory. It was a shock to me to see those silk worms. I would just as soon have a basket of tomato worms in my house; no silk would be worth having those big fat worms lolling around. We visited a number of silk factories, and while the rest of our party went inside (one removes one's shoes at the door, goes in and sits down on the floor, and is shown samples of silk while tea is served), I looked the gardens over. The ground is always bare or covered with moss, which is used a great deal as a ground cover, the same type of moss that I try to keep out of my rock garden. The Japanese prune and train all types of shrubs, and never let one grow freely.

We arrived at a small village and tried to find a place where we could eat and stay the night. No one spoke English, or could understand the guide book Japanese. We were surrounded by large crowds, everyone bowing and smiling, pleased to see us, and making us welcome by many bows. It was getting dark, and we were starved, for one does not buy food in stores in small villages. Finally a taxi arrived and the driver waved his arms and pointed off into the country. We could not lose anything, so we got into the car and followed him, or tried to, for Japanese drive like wild men, and a ride with a taxi driver takes ten years off one's life. We followed that red tail light off across the hills, and after about eight miles we reached another village, where the taxi driver took us to a lovely Japanese inn. We were made welcome by many bows, and were shown rooms. There was no furniture, but a table was brought in and two kimonos for each of us. No English was spoken, but by motions we were told to get into them, which we did, and then were taken to the bath. Our men stayed outside while we women took our bath in boiling water—anyway I thought it was boiling, as I turned brick red when I got in it. Usually the bath boy comes to wash one's back but the men headed him off. After we had bathed and returned to our room, tea was served on a small table, while we sat on small cushions on the floor around it. Bowls of rice, raw fish, pickled ginger, fern fronds, and fried pork were then served, with chopsticks. If we were the first Americans they had ever served, they must have thought we had terrible manners, as the food disappeared in a hurry, chopsticks or no chopsticks. The table was then taken away and our sleeping mats laid out, two mats and two quilts apiece. There was no heat of any kind in the room, so we slept in our padded kimonos. Each of us was given a round bag of rice hulls, hard as a rock, for a pillow, so we folded our sweaters and used them as pillows.

Just as it was getting light the next morning we were brought hot tea. We were already awake, as a group of Buddhist priests had been chanting in the street outside a Buddhist temple. Outside our window was a beautiful garden, small but perfect, with a pool, dwarf pine, and magnolias. We were taken to the bath again, and one scalding was enough for me, so I washed my feet and pretended I'd taken a bath. When we returned to our room, the mats were gone and the table was back. Tea was served, then toast and jelly; eggs were served the men, and I was glad I did not get any, as from where I sat I'd swear they had been kept too long. The proprietor and his wife then came in and sat with us, and we had more tea as we settled up the account. The maids came and carried our luggage out to the car. Our shoes had been cleaned and polished when they were handed to us at the door. Then the bath boy was called and given instructions to see us out. The leave-taking lasted a half hour as we bowed and they bowed, and no one could get away. Not a word of English had been spoken,

but we got along fine. The bath boy mounted his bike and rode in front of us out to the road; we tried to tip him, but he refused.

We then headed south to Kyoto, the only large city in Japan not bombed during the war. It is a lovely old city with four hundred Buddhist temples and shrines, and the summer palace of the emperor. The azaleas went right along with us, *A. mollis* this time, in yellows, oranges, and brick reds.

(To be continued)

SOME ATTRACTIVE ALLIUMS

PETER P. KRIEGER, *Princeton, Iowa.*

Too often we think of the alliums only as strong-smelling onions or garlic, but among the three hundred members of this genus we find some excellent material for our rock gardens. All alliums are of the easiest culture, as long as we provide them with fairly rich and loamy soil. Most of them like a sunny position among the rocks, and all are propagated by either division or seed.

First let us look among our native wild onions. Here we have *Allium canadense* with its grass-like leaves and pale lavender flowers on twelve inch stems, blooming in late spring. *A. cernuum* enjoys a sunny or half shady ledge in our rock garden in neutral or somewhat acid soil. The nodding pale lilac flowers bloom in summer on foot-high stems. *A. tricoccum* is our woodleek. The leaves, resembling those of *Convallaria majalis*, are more ornamental than the clusters of small white flowers. This species prefers a partly shady position in rich, neutral and moist soil, *A. stellatum* is especially useful in the rock garden, because its lilac flowers come when most of our other rock garden subjects are through blooming. *Nothoscordum bivalve* is a garlic without the objectionable garlic scent. The star-shaped white flowers with yellow eye come on eight or nine inch stems.

The European and Asiatic alliums supply us with many fine rock garden subjects. *A. karataviense*, a native of Turkey with white flowers, and *A. victorialis* with greenish flowers, a native of eastern Europe and Asia, are rather tall growing plants and suitable for only the larger rock gardens.

Among the smaller species is the little yellow flowered *A. flavum* from southern Europe, which blooms in our gardens in June. Another worthwhile European plant for our collection of alliums is the pink flowering *A. valdense*, just a little taller than the preceding and blooming somewhat earlier. Both are excellent for the smaller rock garden. Some of the earlier flowering ones are *A. rosenbachianum* with its rose colored flowers and the white flowering *A. triquetrum*. Earliest of all is *A. ursinum*: this harbinger of spring greets us in early April with its pure white flowers.

Allium azureum from Siberia and the lower growing *A. cyaneum*, a Chinese native, provide us with pure blue flowers in June. *A. moly* with bright yellow flowers, a southern European, blooms here in July. *A. narcissiflorum* is a beauty with rose colored bell-shaped flowers in nodding umbels on stems of about a foot. For many years we have had *A. oreophilum* with purple flowers blooming on top of a double dry wall in our old rock garden. Another fine southern European is the white flowering *A. neapolitanum*. *A. ostrowskyanum* is a Turkish native with carmine flowers.

Some of the British catalogs are listing many more members of the onion family whose acquaintance I have yet to make. All of the species mentioned in this article have been tested and found perfectly winter hardy in our midwestern climate.

THE VERONICA TRIBE

*(Continued)*WILL INGWERSEN, *East Grinstead, England*

BEFORE CONTINUING, and concluding, the tale of veronica, space must be found for an apology. I observe with shame that it was in the January 1955 BULLETIN that I wrote "to be continued" at the end of the first half of this article. It was no lack of interest in either veronicas or the A.R.G.S. which caused the hiatus, but an exceptionally busy season during which much important work has had to be shelved. A recent visit from Mr. Harold Epstein, who so indefatigably employs the rolling wheel and soaring wing to carry him hither and thither over the world in search of plants, reminded me that something must be done. As always, I vastly enjoyed his visit and that of his equally energetic wife, who was suffering from an acute attack of "floral indigestion."

The older I become, the less faith do I have in my own knowledge, and more and more critically do I question any horticultural dogma. It has so often been said that trees, shrubs and plants flower more freely after a hot, dry summer and autumn that it has come to be accepted as fact. It has been widely observed in Britain this summer, following the almost sunless summers of 1953 and 1954, that there has been an unsurpassed abundance of blossom, and this applied to Veronicas equally with many other plants. *V. gibbsii*, a neat little evergreen shrub from New Zealand, with small, waxy, grey leaves, has smothered its nine to twelve inch bushlets with clusters of small white flowers, although it is normally not so prodigal.

V. gigantea I have never grown. It comes from Chatham Island, and few plants from there are hardy enough to endure a Sussex Winter, although some of them are successfully grown in the western counties and in one or two favoured, and usually frost-free, areas on the west coasts of Scotland and Ireland. *V. gigantea* is said to make a tree up to twenty or thirty feet tall, with long racemes of white flowers, and would be a decorative subject for those fortunate enough to be able to grow it.

V. guthrieana is a supposed hybrid owning *V. fruticans* as one of its parents. I have known and grown it for many years as a dwarf shrub of the easiest culture, with rather nice clear blue flowers. *V. fruticans* itself, which I omitted from its proper alphabetical position, is a rare native of Britain, and is a sub-shrub only a few inches high, with bright blue flowers each of which has a small red eye. It is not widely cultivated, but deserves recognition as a neat and easy small shrub for the rock garden. It is one of a number of good old plants whose undoubted virtues are in danger of being overlooked in the not altogether desirable obsession with novelties. I am all for progress, but not at the expense of old and faithful friends which are far from being superseded.

V. hectori is a hebe from New Zealand with scale-like leaves closely adpressed to the stems. It varies in height from a dwarf of about six inches to an erect shrub of two feet or more and carries terminal heads of white or slightly pink flowers.

I have grown several quite distinct plants under the name of *V. hookeriana*, varying from lycopodium-like members of the hebe group, to broad-leaved dwarf shrubs. The plant which I am inclined to look upon as the true species belongs in the latter category, and is a useful and hardy shrub of less than a foot in height, with rather broad, slightly leathery leaves, toothed at the margins, and racemes of white, red-veined flowers on erect stems carried just above the foliage.

V. hulkeana is one of the parents of *V. fairfieldii* and is a very lovely shrub indeed, but is unfortunately only hardy in restricted areas or very favourable situations. I cannot truthfully say that it is only to be trusted in such and such a region, for I have seen it flourishing on a warm, sunny paved terrace in a garden which is in no way climatically favoured. If it can be nursed through the baby stage into a shrub with old, hard wood, it will endure quite a lot of frost and will almost always break from below even if injured in the softer tips. It is an evergreen of lax habit, with broad, ovate leaves, usually in pairs as is common with the veronica family. The flowers, of pure soft lavender colour, are carried in loose panicles up to a foot in length during May and June. Where it cannot be grown out of doors it makes a splendid dwarf shrub for a cold greenhouse from which frost is excluded. It is, like so many of the loveliest veronicas, a New Zealander.

V. hybrida is not a hybrid at all, but is closely allied to *V. spicata*, of which it is considered to be a sub-species. It is a native of Europe, including Britain. There are now so many good garden forms of *V. spicata* itself that *V. hybrida* may be regarded as of little garden value, although it is a pretty plant which will always be appreciated by those who favour the species as opposed to hybrids. It bears densely flowered spikes of small blue blossoms on stems up to eighteen inches in height.

Grey-leaved plants are of great value in the herbaceous border, and *V. incana*, a species which was introduced to cultivation from Russia in 1759, gives us a plant with silver-grey foliage and terminal racemes of many bright blue flowers on twelve to fifteen inch stems. It is hardy and easy and very decorative.

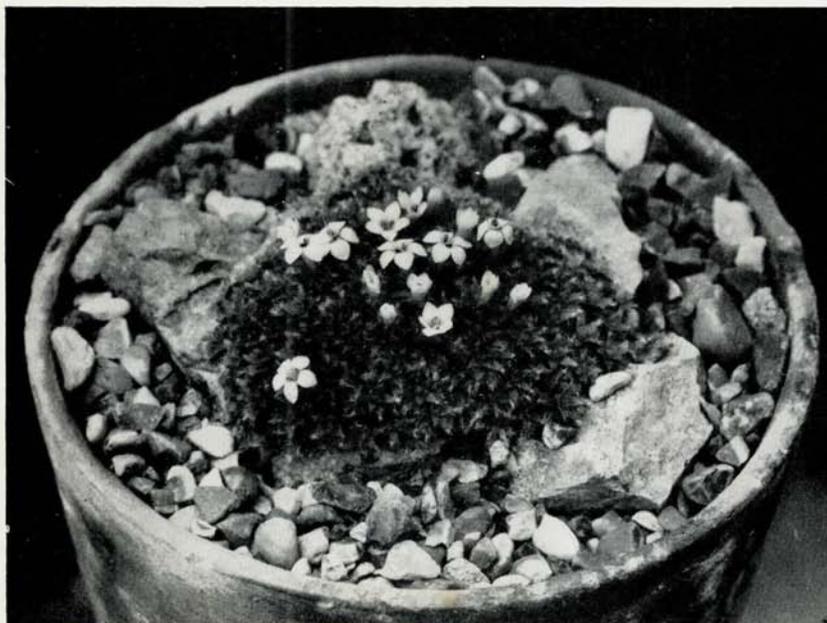
V. laudiana is the other parent of *V. fairfieldii* and is also from New Zealand. It is, in my own experience a little hardier than *V. hulkeana*, although neither parent is as reliable as the beautiful child they have produced. It is a quite dwarf evergreen shrub with leathery, rather rounded, toothed leaves and an almost corymbose panicle, two or three inches in diameter, of pink flowers borne during spring. We must therefore imagine *V. fairfieldii* as being intermediate in appearance between these two plants, in foliage bending towards *V. laudiana*, and with long, loose and graceful panicles of flowers which are of a deeper lilac than those of *V. hulkeana*.

From New Zealand again comes *V. loganoides*, which is an almost conifer-like procumbent shrub with small, pointed, slightly toothed and very leathery leaves closely packed on the semi-erect stems. Clusters of racemes form a compact head of flowers which are usually pure white, but may be veined with pink. It flowers in June and July and is seldom harmed by a British winter if grown in a sunny position and well drained soil.

V. longifolia is a species hailing from Central Europe and Asia, and is represented at its best in gardens by the Japanese form, *V.l. subsessilis*, which is an herbaceous perennial, up to two and a half feet in height with leaves which may be opposite or in whorls. The erect spikes of deep blue flowers are extremely effective from mid to very late summer.

V. lyallii is a neat little shrub, evergreen and of about a foot in stature. The roundish leaves are stiff and coarsely toothed and the plant is decorated from July to September with racemes of small, white, pink-veined flowers. Not an outstanding plant, but hardy, and quite pleasing in a quiet way.

Bean, in his monumental work on Trees and Shrubs, states of *V. macrantha*, that he does not know if the species is, or ever has been, in cultivation. This remark is included in the revision of his book published in 1951, and is hard to understand, as the plant has been known to me for a good many years and is in fairly general cultivation. The plant agrees so closely with his description that I



A cushion of tiny *Hebe (Veronica) pulvinaris*.

Donald F. Merrett

think there can be no doubt as to its verity. It is the largest flowered of all the veronicas, and ornaments its bushes of rigid, woody stems with terminal clusters of pure white blossoms which are as much as an inch in diameter. It flowers so freely as to obscure completely the eighteen inch high plants beneath the canopy of decorative flowers during the early summer. It is found at considerable altitudes on the South Island of New Zealand and is hardy enough to withstand any but an exceptionally severe winter unharmed. I have known it to be cut back, but it invariably breaks freely from the base and flowers as well as ever.

V. lycopodioides is, as its name suggests, a typical member of the hebe group, its scale-like leaves closely pressed to the stiff, erect stems, and arranged in four ranks, giving an angled appearance to the growths, which are up to two and a half feet tall. The small white flowers are arranged in terminal heads. It is a plant more interesting than beautiful, and not over hardy.

V. nummularia comes from the Pyrenees, and is a good plant for rapidly covering the ground with a carpet of leafy stems, above which rise blue or pink flowers on short stems. It is too vigorous to be planted near smaller plants, but has its purposes as a carpeter.

From Asia Minor and Syria comes *V. pectinata*, which is more commonly met with in British gardens in its *rosea* form, in which the short spikes of flowers are deep pink as opposed to the blue of the type. It is a pleasant evergreen carpeter for a sunny spot.

V. peduncularis, a native of the Caucasus and Asia Minor, is another species which is generally represented by a garden variant, in this case *V.p.* 'Nyman's variety.' It is a loose shrub of some nine or twelve inches, with evergreen foliage, and loose panicles of quite large flowers, deep blue in the rarely seen type, and a pleasant shade of china-blue in the above variety. It flowers throughout the

summer and pays a good rent for the space it occupies in the garden.

V. perfoliata is an Australian plant, and is supposed to be tender, although I can testify that it has endured with no attention for many years on a cold hill-side. It is not a spectacular plant, and makes a sprawling bush with entwined stems, which are adorned with broad grey stem-clasping leaves in pairs. Violet-blue, rather small flowers are carried in racemes from the uppermost leaf axils of the untidy stems. Although it has few claims to a prominent position it is a plant of which I am quietly fond and would not like to be without.

V. pimelioides and *V. pinguifolia* are two N. Zealand Hebes which are represented in gardens by several named varieties. They are characteristically dwarf, stiff-stemmed bushes clad in waxy grey leaves, the flowers of *pimelioides* and its forms being purple-blue, and those of *pinguifolia* white. They are useful small shrubs, easy to grow and reasonably hardy, but make no claim to any great beauty and rest inconspicuously in the great concourse of veronicas.

V. prostrata is found in gardens in a multitude of varieties, and is more often seen labelled *V. rupestris*. The species is from Europe and northern Asia and has been more or less abandoned in favour of the improved forms, which differ from it in little but colour and stature. The flowers may be blue, white or pink, and the habit of the plant is to form a low mat of green or ash-grey leaves, and to produce a myriad semi-procumbent stems on which are short branched spikes carrying the decorative flowers. Especially good varieties are 'Spode Blue,' with clear light blue flowers, *rosea*, pink, *alba*, white and, specially precious, *nana*, a minute carpeter with deep blue flowers on two-inch stems.

V. repens is frankly a weed from southern Europe, forming flat carpets of green with pale blue or pink flowers. It makes a quick ground cover for bulbs, but will smother less vigorous plants in its vicinity. I missed in my alphabetical arrangement an equally invasive species, *V. filiformis* from Asia Minor. This, although it is wondrously pretty when its carpets of lush green leaves are sheeted with a mist of pale blue flowers, will spread so rapidly that it is not to be trusted in the garden but must be relegated to wilder areas where it may naturalize harmlessly.

A useful mat-forming perennial is found in *V. saturooides*, a Dalmatian plant of the easiest culture. The woody stems spread from a central base, rooting as they run, and the crowded terminal racemes of blue flowers are decidedly attractive. There is a veronica which may well in time supplant *V. saturooides*, and is probably a sub-species of it; this is *V. kellereri*, which is similar in all ways but has flowers of clear deep blue and is more of an aristocrat.

V. spicata is a common European species which has provided gardens with a number of excellent improved varieties including some notable hybrids recently raised and now being distributed under individual names. It is an herbaceous perennial with leafy stems which vary from six inches to a foot and a half in height. It is useful in its dwarfer forms for the rock gardens, whilst the taller ones are happily situated in borders and flower beds. Long, almost heather-like racemes of flowers, either white, blue, or various shades of pink to deep red make this a handsome and desirable plant.

I have also liked *V. surculosa*, a species from Asia Minor and very useful as a free flowering plant for the rock garden. It makes a dense prostrate mat of leaves with short racemes of deep blue flowers over a prolonged period.

V. telephifolia is an Armenian, and very choice and lovable. It is completely prostrate, its wiry stems creeping about at ground level, adorned with blue-green rounded leaves, rather fleshy in texture. Wee racemes of china-blue flowers

sit on the carpets of attractive foliage in pleasing combination. It is apt to suffer during bad winter weather, but I have always found it to be capable of speedily replacing itself even if only a few rooted scraps survive.

V. teucrium, from S. Europe and N. Asia, is another veronica which is met with under one or other of its named varieties, the type being neglected in their favour, and justly so, since they are better garden plants. Any form of *V. teucrium* is worth a place in the garden, but I am especially fond of the golden-leaved *V.t.* 'Trehane' in which the light blue flowers associate so effectively with the colourful foliage.

That, then, must be the end of Veronica. I do not claim to have provided anything like a complete description of this great family. A number I have left out because they would not be hardy, especially in the Eastern States, others have nothing but botanical interest to recommend them. The ones I have described are all species and varieties which I have grown and enjoyed at various times.

ENGLISH WILD FLOWERS FOR THE ROCK GARDEN—IV

R. GINNS, *Desborough, England*

With the coming of summer it is necessary to leave my favourite woods, which are now devoid of flowers, and the water meadows, which are now hay fields, and look for plants on heaths, moors, and other open waste land. In the course of the years I have introduced quite a lot of plants into my garden from such spots—and sometimes have wished that I hadn't!

Let us consider the geraniums first. *G. pratense* is a lovely thing with its masses of saucer-shaped, inch-wide flowers of a delicate lavender blue. It is unfortunate that it is too large for the average rock garden, but it makes itself at home amongst the shrubs that form the background. But it appears at its best when growing wild in wide drifts as I saw it on August Bank Holiday, covering the dry-as-dust slopes of a railway embankment; or even better, massed along the wide verges of a country lane with the green hawthorn hedges as a background. In the garden it seeds itself moderately, and it is by no means unusual for some of the seedlings to be pure white. Other people have had other sports so that there are several named varieties obtainable: a real blue, a blue and white striped, double lavender and double white.

G. lancastricense is found wild in one small part of the country only, hence its name. This is the small part of the county of Lancashire that forms part of the Lake District. It is, in my opinion, one of the best geraniums for the rockery. It forms ground-hugging mats of finely cut, dark green foliage above which hover the large pink salvers. The colour contains no hint of that magenta that makes some geraniums difficult to put in with other plants.

G. rotundifolium is the last of the English geraniums that I intend to deal with. I first met it twenty years ago on a hot summer's day, growing on top of a dry wall. It formed little rosettes of rounded leaves which had turned bright scarlet in the drought. It looked quite brilliant and certainly inoffensive. So I took a few home with me and planted them on a dry bank. They grew, but only during very hot dry summers did they turn scarlet. Moreover, an explosive seed mechanism caused young plants to appear everywhere. In spite of its seeming frailty it can cope with dwarf shrubs such as rock roses. In such positions it gets overlooked during weeding, so that the following year there is another crop to be weeded out.

Speaking of rock roses, we have a nice little thing that creeps about in the thin turf that covers the mountain limestone of our Peak District and elsewhere. In such conditions it is quite prostrate and has tiny dark green leaves and small bright golden flowers. This is *Helianthemum vulgare*.

In similar conditions also grows *Thymus serpyllum*, not an inch high but with comparatively large flower heads of a dull red. Seeing it like that, one would say that it was an ideal ground cover for small bulbs. But I have found that in the richer soil of the garden it ramps and heaps itself up into cushions that only the most vigorous bulbs such as *Crocus speciosus* can cope with. In view of this habit its introduction to the rock garden proper is a matter fraught with considerable risk. But I have it planted in the edges of the paths from which it grows over the larger rocks forming the base of the rock banks. Even so it needs trimming back annually to prevent its encroaching upon the lower bays which are usually reserved for the smaller alpine. In a garden that I know, reserved exclusively for native plants, all the paths are carpeted with *Thymus serpyllum*, where it makes a springy, aromatic carpet.

It is to be expected that a plant which grows in myriads over our chalk downs should show some variation, and this is found to be the case. Several distinct wildlings have been brought into gardens, propagated, and distributed. Most distinct of all is the variety *albus*. Even when not smothered with its snow white flowers in June and July it can be easily distinguished from the other forms, as the foliage is emerald green instead of the usual dark green. In the variety *coccineus*, the rather dull red of the type gives place to a rich crimson, whilst *coccineus major* is the same thing but larger in all its parts. In contradistinction to this is a variety *minus* which is very compact but extra aromatic. A fairly recent introduction has bronze leaves and rich red flowers. This has been called 'Russetings', after what was a well-known garden in the heart of the chalk downs. 'Annie Hall' has pale pink, and 'Pink Chintz' rich rose-pink flowers.

But it is not only in flower colour that variation occurs. A self-sown seedling in my own garden regularly flowered a matter of two or three weeks earlier than the type and had clear red flowers. A nurseryman saw and admired it, and put it into commerce under the name 'Desborough'. Foliage variation occurs in variety *fol. aurea*, where the gilding of the leaves is most pronounced in winter; and in variety *languinosus* which is densely covered with grey hairs. The trouble with this last variety is that it rarely flowers. Only once in twenty-five years has my own plant given me a flower.

Shakespeare writes "I know a bank where the wild thyme blows", and this formed a couch for Bottom in "A Midsummer Night's Dream". My Siamese cat, Boh, likewise appreciates such a cushion and she delights to sit on a large mound of the woolly leaved form in the sun, occasionally titivating her appetite by nibbling at the young leaves. Actually, a large boulder well draped with this variety forms quite a comfortable resting place after the arduous of weeding among the rocks.

A small round bed isolated from the rest of the rockwork has been planted with a selection of these thymes which form a pleasantly varied evergreen carpet, which becomes brilliantly coloured in June and July.

* * *

North America . . . will not always continue to follow the British lead in less successful pursuit of such genera as Cyananthus or Primula, but will utilize more extreme and sharply contrasted seasons to grow the choice composites and legumes and other plants with which we often fail, or which we have never really tried.—CLAY.



NORTHWEST UNIT YEARBOOK

The Northwest Unit has most obligingly permitted the BULLETIN to reproduce the delightful cover of their excellent yearbook. How many of the plants can you name? Answers are at the bottom of the following page.

REPORT OF THE NORTHWEST UNIT

HELEN MORRIS, *Corresponding Secretary*

THE MARCH MEETING of the Northwest Unit was held at the Clubhouse of the University of Washington Arboretum. A short business meeting was concerned with the problem of having our annual plant sale this year. Most of our gardens are showing great bare spots as the result of "the big freeze," as our weather of last November is now being called. Brian Mulligan showed a pot of *Scilla tubergeniana* and gave us the interesting story of its introduction: it came to the firm of Van Tubergen as a chance stowaway in a shipment of pusckinia bulbs which were mistakenly sent as chionodoxa.

Our program was a panel discussion on "Alpines of the Southern Hemisphere". We explored South America with Mrs. L. N. Roberson; Africa with Mr. J. Shellenberger, and New Zealand with Mr. R. Ornduff. Dr. C. L. Hitchcock conducted us on a tongue-in-cheek tour of Antarctica, describing a fascinating though mythical plant that sent geiger counters wild, and that generated enough heat to hatch penguin eggs.

Our April meeting was again at the Clubhouse. We enjoyed refreshments while we milled about examining plants that had been brought for the sale. Everyone seemed to have outdone himself with donations, since it had been expected that there would be so few. With little business to take care of, James Fletcher, our auctioneer, swung into action under the guidance of Sale Chairman James Buzard. Many new and rare plants were acquired by members, and at such a pace that it was difficult to catch all the names. Some of those noted were *Epigaea asiatica*, *Phlox adsurgens*, *Leucothoe davisiae*, *Cypripedium montanum*, *Saxifraga petraschii*, *Dodecatheon poeticum* and *D. conjugens*. There were a number of primulas, among them *P. wulfeniana*, *P. x pubescens*, *P. farinosa*, and many iris, including *I. ruthenica*, *I. chrysographes*, *I. missouriensis*, and that tiny treasure, *I. lacustris*. Rhododendrons, cyclamen, soldanellas and ferns were among the host of other offerings. The bidding, as always, was inconsistent, with some rare plants going at absurdly low prices, while competition boosted the values of some of the commoner plants. Our auctioneer kept it a lively, fun filled evening, and our treasury was enriched by about \$165.00, making the effort extremely worthwhile.

The May meeting was planned as a spring flower show, but with so few plants in condition for showing, we brought our favorite garden books to be shown also. The books were presented under the following classifications:

1. Encyclopedic works on alpine and rock garden plants;
2. Monographs on genera;
3. Rare or historical volumes on plants;
4. Rock garden construction, maintenance, and cultural technics;
5. Plant exploration;
6. Miscellany on rock garden, alpine, or other ornamental plants.

The Book Show was conducted by Mrs. Page Ballard, who, with her husband, has a choice collection of books, much of it on gardening. Members de-

Key to plants illustrated on preceding page.

Asplenium trichomanes

Lewisia rediviva

Silene hookeri

Soldanella alpina

Cassiope mertensiana

Shortia galacifolia

Cornus canadensis

Penstemon rupicola

Linnaea borealis

Darlingtonia californica

scribed their own books, with a time limit of one minute per book. There were many familiar favorites and a number of new publications that some of us had not yet seen. It was under class three that we found books quite new to us, although old in their history. Mrs. Ballard brought some treasured old volumes from their library. The oldest complete volume was an herbal by Matthiöle and Pietro published in 1559. She also showed leaves from "Hortus Sanitatus" dated 1511. Another of their books, shown under class six, was "Evelyn's Sylva", first published in 1662, but their volume dated 1776. Also shown under class three was Mrs. Bittman's copy of "Gardens of China", a large book with beautiful illustrations, including some of Japanese gardens. Foreign books, too, were shown: there were lovely little Danish and Japanese books, whose exquisite illustrations and Latin nomenclature made them of universal interest.

An oddity in the Book Show, that any avid gardener can appreciate, was what one member presented as his wife's favorite gardening book — a check book, "with or without stubs".

The "Consolation Plant Show" was non-competitive and was presided over by Dr. Kruckeberg, who called on each exhibitor to describe his plants. The exhibits included greenhouse plants, alpiners, shrubs, and dish gardens. Rhododendrons which were blooming nicely (a rarity this year) were *R. kotschyi* with bright pink blossoms and *R. sargentianum* with pale yellow ones. *Menziesia lasiophylla* was a charming sight, with its beautiful branching habit, soft hairy leaves, and dusty red-purple flowers. This is one plant that came through the winter without harm. Carl English showed a dish garden of *Dodecatheon latifolium* 'Red Wings', a brilliantly colored variety which he has propagated from a plant he discovered in a field of dodecatheons twenty-five years ago. *Lewisia cotyledon* made a striking picture with its halo of pretty pink flowers. There were several silenes, including a lovely *S. hookeri* covered with soft salmon pink blossoms. A small *Iris verna*, blooming profusely, and *Aquilegia jonesii* peeping out from a dish garden, were among the other exhibits. There were many other plants, equally intriguing and with interesting botanical stories.

TWO REASONS FOR ROCK GARDENING

G. G. NEARING, Ramsey, N. J.

My first rock garden at Guyencourt, Delaware, was built because I had raised a number of dwarf plants experimentally, and had no place to plant them out. Others, no doubt, have had the same experience. We are conscious of the fact that not all people, and certainly no dogs, feel any appreciation for ornamental plants. If we set a small choice plant where it can be trampled, the chances are that sooner or later trampled it will be.

One reason for building a rock garden, then, is to protect tiny ornamentals from non-gardeners and other animals. And because of this protective purpose, the type of rock garden construction must be carefully considered. Those artistic designers who insist that what we need are a few big rocks with wide stretches of lawn and flat beds between, may have a point in aesthetics (though I do not agree that this pattern is the only pleasing one, or even the most pleasing), but they have missed an important, perhaps one of the most important purposes of the rock garden.

In such a wide open garden, the choice rarities are not protected. The big feet of our best friends are invited right out next to our most treasured acquisi-

tions, with inevitable tragedies to follow. One friend joshes another about the girl he was out with last night, receives a playful poke in the ribs, and steps backward right on the crown of an only surviving *Gentiana farreri*. He is sorry, but the gentian is sorer.

Rule one, then, could run something like this: where the plants are, make the walking exceedingly treacherous, but provide good inviting paths within easy seeing distance. So place the stones that they can be walked on if necessary, but the spaces between them will suggest a sprained ankle.

Anyone who has built a rock garden or two will understand how to bring this about. For the benefit of any neophyte who may read these words, I will explain how I like to do it. First I decide where the paths should go, not straight unless they are to lead somewhere else, but winding and twisting and intersecting, and uphill and down. Where they change level, it should be by rough stone steps, to prevent wash. Generally the rock work should be built upward from one side of a path. A few rough stones of different sizes and more or less staggered, are placed at the path edge, leaving where they touch, little nooks and recesses too small for the human foot, but big enough for crevice plants. A mountain primula or an alpine gentian revels in such a location, and seems almost to thumb its nose at the giant humans who pass so near.

Behind these base stones, soil is filled in to about the tops of most of the stones, and rising a little behind. If drainage is needed, this fill should be soil at the front, small stones behind. However in my experience the mice and chipmunks like this arrangement better than do the plants. Overfilling is best because any fill will settle considerably. On this fill place more rocks, some resting on the backs of the base stones, others farther back, so that pockets are formed, little irregular beds each of which can house a dwarf plant. More fill behind the new rocks, and so on up, like steps—but they must not look like steps. The rocks should vary greatly in size and in the manner of placing. There should be few straight lines, few even slopes. The art is to build a promontory here, leave a ravine there, and again a slope like an alpine meadow. Your eye must tell you where to place each. Above all, the whole structure should be rugged.

My second rock garden, near the first, was built similarly for the same protective purpose. The first was a southeast slope, partly shaded, about 50 by 75 feet, confined on two sides by fences, on the other two by roadways, a stream running through it with one boggy shore. It was soon filled, with no room to expand. The second faced northward to accommodate subjects that need protection from the sun. Uphill to the south stood several tall spruces.

My third rock garden had an added and even more important reason for its creation. All these occupied a small part of the grounds of friends with whom I had gone into business. They had remodeled a farmhouse on a hillside, and wanted to landscape the whole area by degrees. Straight down that hill from beside the house ran an old driveway, cut by the rains into a gully, in places four feet deep, making on the otherwise pleasantly sloping field as ugly a scar as could be imagined. A new driveway had been laid out to wind around by a gentler slope at a considerable distance.

"What can we ever do with that unsightly gash?" Mrs. Phelps asked.

I had come up with answers to most of the landscaping problems she had presented to me, so I offered to turn this hillside into another rock garden. With the first two full, there were dwarf rhododendrons coming on, and this north slope could be made to suit them well. I had already weighed the undertaking, not an easy task. All the work had to be done with my own hands, except when Colonel Simons, a friendly official of the duPont Company, put on his overalls during the weekend, and came down to push a crowbar with me. He said it helped to work off the cocktails.

On the west flank of the gully, I found that by digging off a few inches of soil, a fine decorative ridge of mica schist could be exposed, which eventually became an integral part of the garden. But I had always to keep in mind the fundamental purpose of killing that ugly line of the road cut. To accomplish this, I cut the gully three or four feet deeper, and make it wind enough so that you could not see straight through. A stream flowing down this new ravine would have added immensely to its beauty, but entailing more labor than my own time would permit, could not be arranged. So a path with many irregular steps had to serve.

To change the straight and offensive course of this ravine, it was only necessary to excavate the clay bank on the east about half way down, while building it out into promontories above and below the excavation. A new ridge jutting from the west bank toward the same excavation, cut the old course of the drive effectively, and left only a sharply winding hollow. The stones pried out in deepening sufficed to face the entire east bank and the west bank below the outcropping ridge, with appropriate rock work.

An inevitable problem with the one-man rock garden is to supply rocks large enough to look well, for small stones, when used exclusively, look monotonous. To solve this difficulty, I began, not at the bottom but at the top, which is all wrong unless you puzzle out just how to make it work. In this way, when a quarter-ton bit on the ledge came loose, I edged it along the bank with bars and plants, until it lay chest-high above the path, although the moving had of necessity been slightly downhill all the way. Explanations of how I got it there single handed consumed many hours of my time later on. The same trick repeated many times supplied the larger sizes which were necessary to balance the imposing ledge above.

Another ruse is to break a bulky stone into several parts, move them to its destination and there piece them together. This actually improves its serviceability in the rock garden, because a little soil shoved between the parts as they are put back in place, makes a fine root run for crevice plants, which soon and very effectively conceal the stratagem. The schist yielded well to a 16-pound sledge. Often it is even possible in this way to construct an imposing ledge with comparatively small stones, and make them look as if they belonged together, even though they may have come from different spots. But this can be done only when the rock is all of one kind, and where there is plenty of it to match up the faces. If necessary to use a little mortar, this can be hidden with stone chips, soil and plants.

At its lower end, the completed gully garden opened out into a sort of amphitheater, with a wing of steep stoned-up bank curving to the west, and a little side ravine cutting into the east slope. Paths with rough steps led from the main path in the ravine bottom to various parts of the slope, and I was pleased when the children immediately began to use them, running here and there over them almost by the hour.

Uphill to the south, and to the east and west in all directions, groups of rhododendrons and dwarf conifers were so placed as to screen in and isolate the rock garden from the surrounding grounds, while a little behind these, stood cryptomerias, spruces and pines, adding height and intensifying the effect of screening. The only unobstructed view was from the downhill side.

Bared bedrock presented a problem because although its hollows were filled with soil, few desirable plants except *semperivums* could find a foothold out in the crevices of its wider expanse. Some finally did, and it is now partly hidden under a cascade of bearberry.

Many similar problems of landscape design can be solved by a rock garden rather than the classical can-dump. In fact many can-dumps, if removed, will

reveal admirable sites for rock gardens. A few miles from my present home is a farmhouse posed tree-high above the road on a great bulge of bedrock perhaps fifty feet across, which if rock-gardened along its edges, would make a memorable sight for all who pass that way. Instead, two or three generations of ashes have been dumped over the conspicuous end of the rock, while the other end is lost in weeds.

My use of newly broken rock and stones freshly unearthed from under clay may have left some experienced rock gardeners aghast. It is true that weathered stone is to be preferred if available, but where you have any stone at all, the weathering is easily supplied. Just sprinkle the whole rock garden with the hose every evening, a practice good for the plants in any case. Within a few days, algae, mosses and lichens begin their work, and by the end of the season the unweathered rock will be weathered. Any white scars from the crowbar can be softened by the touch of a brush with turpentine and lampblack.

There are other reasons for building rock gardens, the best one being that you like them, but if you start one for any different reason, you will almost certainly come to like it anyway.

NOTES FROM CALIFORNIA

VIRGINIA STEWART, *San Anselmo, California*

FOR EVERY GARDENER, beginner or advanced, the stimulating part of gardening is the additions one makes from time to time to the garden. Whether it be a collected wildling from the fields, a gift from a fellow gardener, or a purchased plant from the nursery, the direct challenge of growing a new plant is part of the fun of gardening. Possibly no field of gardening offers more new material than that of alpine and rock gardening, especially in the United States where this phase of gardening is still in the embryonic stage for most of us, as evidenced by the few nurseries that supply this type of plant material.

The last Robin of the California section of the American Rock Garden Society was devoted to new plant material in members' gardens. Ray Williams of Watsonville, California, who grows more new and rare plants than anyone I know, wrote enthusiastically of *Draba andina* (*D. oligosperma* var. *andina*). To quote Mr. Williams, "It seems to be quite easy going for an American alpine and even the snails have no taste for this tiny silvery gray ball only one inch high, with almost stemless little yellow flowers. The problem is how to propagate it for it hasn't set seed and cuttings are so short and tiny that they would be almost impossible. Wyoming is its home although it strays into other states".

*Gypsophila*s seemed to lead all other species as newcomers among our growers. In our garden *G. cerastioides*, the mouse-ear gypsophila from the Himalayas, proved to be a very strong grower which rambled around quite freely, but to date could not be termed invasive. The flowers are white, with pink veinings, the foliage silvery green and rather downy. It receives full sun in a protected spot. *Gypsophila fratensis*, another newcomer to our garden, is similar to *G. repens*, however the flowers are somewhat larger and the entire plant has a more open and airy manner of growth. It produced an abundance of bloom on our warm sunny hillside. Seed of *Gypsophila franzii nana compacta* from the A.R.G.S.

seed exchange has done well for Mr. Williams. He reports it to be free blooming and more attractive than *G. repens*, with flowers of a better shade of pink. It has dense robust growth, alas however neither "nana" nor "compacta". Another gypsophila grown by Mr. Williams with success is *G. silenoides*, a subshrub of six inches, with leaves and flowers somewhat like those of *G. repens*. He describes it as an interesting twiggy little bush that will probably spend the winter without foliage.

A real treasure came our way two years ago in the form of *Asperula pontica*, a truly lovely plant that would not disappoint even the most discriminating collector. *A. pontica* is very refined woodruff, mat forming, with the loveliest pink flowers imaginable. We have given it a semi-shaded spot and good drainage. Farrer treats it very briefly, comparing it to *A. pendula*, with which I see very little similarity in form or growth.

Last year was excellent for saxifrages in our garden, and for many it was a first blooming time, no doubt due to the very cold dry winter and spring. *S. x 'Cranbourne'* of the Kabschia group was indeed a charmer: bright pink flowers in profusion studded the plant for weeks in early spring. *S. x 'Paulinae'*, another newcomer for us, was equally lovely with pale yellow blooms. *S. lilacina* was a frail plant on arrival and did not survive the summer. However we shall try again as this saxifrage from all reports is very choice.

Erinacea anthyllis, a small deciduous shrub native to the Iberian peninsula, is described by Farrer as "a dense hedgehog of very long silver-green spines about five inches high and a foot across". However Mr. Balls of the Santa Ana Botanic Gardens informs me that in its native clime it grows to four and five feet across! The flowers are a lovely clear lavender blue, pea-shaped, with conspicuous silver calyces. It requires a warm slope.

Some years ago we acquired a plant of *Aphyllanthes monspeliensis*, the one member of a genus belonging to the Liliaceae. Unwittingly it was planted in the wrong spot and as a result left us in a few weeks. On acquiring a second plant, a more careful check was made of its requirements with the result that it now has a proper spot between two rocks with plenty of sunshine, but no burning exposure. Our reward was great when after a few months the rush-like foliage burst forth with pretty blue flowers on the tips. This lovely and unique plant from the Mediterranean has proven to be a most welcome addition to our garden.

With the prolonged and heavy warm rains on the Pacific coast this winter there will no doubt be marked differences in the growth of many plants that prefer our frosty dry winters and moderately wet springs. I am always amazed at the adaptability of the majority of plants brought into our garden, which of course gives us the courage to go on and try more and more.

ARABIS "SPRING CHARM"

Last spring, in a well-known nursery, there was a bed of a rather new Arabis, catalogued as "Spring Charm". The plants seen were vegetatively propagated, and were of a uniform clear pink. The grower said that seedlings vary much in color, and that he had selected the best.

As he grew it, it was by far the best pink arabis I have yet seen. The general appearance and needs are that of *Arabis albidia*, but the plant seems so far to be more compact, and the leaves suggest vaguely that there may be other blood in this variety.

CRW

OLD FAVORITES

MADELINE MODIC, *Sewickley, Pa.*

While looking for new plants in the catalogues, I have been thinking, too, of some that gave me comfort this past summer — the driest July that I can remember. We say little of plants that are easy to find and easy to grow, yet there are times when our gardens would be bare without them.

The aethionemas are sturdy creatures, and with their blue-green foliage, remain attractive all year. Shrubby in habit, they are regal in appearance if given a good shearing after flowering.

Iberis is a close relative; in fact some catalogs list *I. jucunda* as *Aethionema cordifolium*, and I will leave it to the experts to say which is right. While aethionemas come in shades of pink, the iberis are best known for their flat white clusters over evergreen foliage. *I. jucunda* and *I. gibraltarica* come in shades of purple, and do not stand as much neglect as the white species. One must shape them by shearing into little mounds after flowering; in doing so, one makes iberis as pretty as boxwood. *I. sempervirens* is the best-known white. The new hybrids make the blooming season longer: 'Christmas Snow' blooms in the fall, while 'Little Gem' is the smallest of the group and 'Snowflake' has the largest flowers.

Hieracium villosum belongs to a family of weeds, and is the only member of this genus that I will have in my garden. Its foliage seems to be cut from heavy felt, and is covered with grey hair, giving it a very attractive shaggy appearance. Here in my rock garden it does not seed itself as its wild cousins do.

Antirrhinum asarina is a pretty little snapdragon which seeds itself in my garden, but not at an alarming rate. In the way it hangs from rock crevices, it reminds one of a tiny English ivy. The flowers are not as showy as one would like, and too often are hidden under the leaves, but the plant's endurance wins much praise.

To me helianthemums are a must for every rock garden; they live through the most trying conditions and all seed themselves except the double-flowered ones. After five or six years they die out here. Whether this is natural or due to my not caring for them according to their likes I do not know, although I know they like dry limestone soils in full sunshine. Here too one must prune hard after flowering. One can find seeds of helianthemum in the 5 and 10 cent store, but my best colors came from a package I bought labelled Ben Strain.

Gypsophila repens is a most attractive creeper that takes no end of abuse. I have been wanting to try other members of this genus, such as *G. muralis* which has rose pink flowers, and *G. cerastioides*, which is called mouse ears. It may be that as with the tall species *G. oldhamiana* is the only one I really like, *G. repens* will still be my favorite after all.

Erysimum linifolium, the penny cress, is delightful. Here on Thanksgiving Day it was full of bloom.

These are all so easy to find, either in seeds or as plants, that it is a shame to be without them. I like others, and am looking forward to new, but surely not better, plants than these. That is the enchanting charm of having a rock garden.

* * * *

When an Alpine, after years of vigour, looks yet more vigorous than ever before, then, in that hour of plethora, you may begin to fear that he has lived out his life, and is now preparing brilliantly to take his leave.—FARRER.

SALMAGUNDI

WHEN, LAST FEBRUARY, a quotation from the writings of Farrer was chosen to precede this column in the April BULLETIN, it certainly was not our intention to serve as a long-range weather forecaster. In spite of the delayed publication of that number, because of the extra labor involved in the Index, the only daffodils and anemones in bloom were tiny *Narcissus asturiensis* (*minimus*) and our native hepatica, both looking sadly frost-bitten.

On April 2 the snowbanks which had covered the rock garden since before Thanksgiving began to melt, and two days later the bulbous iris, several crocus species, eranthis and snowdrops were in bloom. But freezing weather and snow at frequent intervals ever since have left few flowers undamaged. Yesterday, May 16, after three mild days during which plants made rapid growth, there were rather heavy snow showers for several hours, and this morning, ice on the pools and the thermometer at 25°. It is still too early to determine the extent of damage, but the prospects look bad for a local flower show but two days away. While "Spring comes slowly North this way", never, that we can recall, has Winter been so reluctant to leave. Perhaps it is just as well that anti-freeze and snow tires have not yet been removed from the car.

* * * *

The rock garden at Cornell has suffered, this spring, from a pest which seems never before to have troubled it, and for which no adequate remedy can be suggested — the plant thief. Courting students reclined on banks of forgetmenot, photographers trampling down choice plants to reach vantage points for viewing the cascades, dogs and children racing through the unfenced garden, all have been commonplace hazards, but this is something new. Nor is the marauder simply a mischievous child, but someone who knows plants well enough to select the more valuable ones, including a fine clump of *Sanguinaria canadensis* fl. pl. Perhaps the only remedy is to plant the garden with nothing but brambles and poison ivy.

* * * *

The excellent reports on the activities of the Northwest Unit which are being furnished by the Corresponding Secretary, Helen Morris, should offer some first-rate suggestions for program chairmen of other units. The plant sale, which the New England Unit has likewise tried, seems particularly enjoyable and profitable.

For some months no word has been received from any of the other units of the Society, and news of their activities would be most welcome.

* * * *

This spring, for the first time, we have utilized at home the method of seed germination described by Russell Mott in the BULLETIN for October, 1954. While it was impossible to duplicate the conditions available at Cornell, jars sown about April 1 and set in a cool, but not cold, room, are germinating freely—among them androsaces of the Aretia section, only six weeks after sowing. Unfortunately Vancide 51 is still unavailable generally, but as its only function seems to be that of preventing damping-off (it does not check molds), even without treatment of the peat and sand mixture, good results can be expected.

* * * *

What is your favorite plant? We have tried to answer the question for ourselves, but in vain. When the snow leaves the garden, within a few hours the little iris of the Reticulata group burst into bloom within a few hours, and nothing could be lovelier than *I. bakeriana*, *dandfordiae*, *histrioides major*, and

persica; *I. reticulata* in its various forms, blooming some days later, seems a dull thing beside these. But their beauty is of short duration, for snow and freezing weather rarely leave the delicate flowers undamaged for more than a couple of days. Shortly afterward, the dooryard is brilliant with the forms of *Hepatica triloba* which we have been selecting from nearby woods over a number of years, in color from white to midnight blue with white stamens, and brilliant deep rose. Then the rock garden becomes gay with multicolored *Anemone blanda*, difficult to establish from imported tubers, but now self-sowing freely in the most improbable places, and in chinks where it could never have been planted. There follow *Gentiana "acaulis"* which, when we first saw it in bloom at the International, seemed the most incredibly beautiful plant in existence; and one treasure after another, until we end up by deciding that the flower of the moment is the most beautiful of all.

* * * *

Spring bulbs are in full bloom now — between freezes — and when the BULLETIN reaches you, it will soon be time to place orders for fall delivery. It is unfortunate that since the failure of The Barnes Importers there seems to be no dealer in this country handling many of the rarer species, most of which are still available in Holland. It might be well to write to your favorite bulb importer, and request—or even demand—that he procure your favorites for you.

So far as our experience goes, few importers offer much information regarding the size of bulbs available, an important consideration in purchasing the named varieties, for size of flower, and number produced, are determined by the bulb. In the case of species, often only one size is offered, but among named tulips, first size is 12 cm. and over; second size, 11-12 cm., which produce good but

MAYFAIR'S NEW HANDBOOK OF RARE ALPINES and ROCK PLANTS

Our new Handbook is chuck full of information about the rare alpine and rock garden plants most suited to American gardens. It gives complete descriptions and detailed cultural directions for about 675 different individual plants. A desired addition to every gardener's library.

PAPER COVER EDITION50

HARD COVER EDITION \$1.00

(No stamps please)

GET ACQUAINTED OFFER

12 Rock Plants, all different \$4.75

25 Rock Plants, all different \$9.25

Our selections of the best varieties, F.O.B. Hillsdale

Mayfair NURSERIES

Box 87

Hillsdale, N. J.

Free Price List on Request

smaller flowers, seems to be the most generally available in this country. One large American dealer apparently offers only single-nosed narcissi, and we have never seen, among bulbs obtained over here, the equal of the double-nosed No. 1's sent out by one of the leading Dutch dealers. Hyacinths, on the other hand, are more satisfactory for bedding if the largest size is not chosen: 17-18 cm. seem the largest that should be used in the open, but these are far larger than we have seen in the dime stores. Crocus are often offered in only the smallest size which Dutch regulations allow to be exported, 7-8 cm., but the largest, 10-11 cm., look like fair-sized gladiolus corms, and produce many more flowers than the smaller ones. It will pay to check various bulb catalogs and take careful note of the size offered, for the large ones are but little more expensive than the small.

* * *

Variation of the environment is in part under (the gardener's) direct control, and in part very much beyond it—in the open garden he can only curse or bless the climate (and perhaps fit water-nozzles and braziers out of bravado) whatever he does to the soil.—CLAY.

* * * *

Though crude manure is loathsome to their delicate taste, all mountain plants fairly revel in ripe and very rich conditions. —FARRER.

SALUDA INN

High in the Blue Ridge, and within easy driving distance of the Great Smokies, a fellow rock gardener would welcome you to winter or summer vacationing or all-year retirement. Simple living, natural beauty, a paradise for botanists and bird lovers. Prices are reasonable. Write to . . .

MRS. C. W. MASON, SALUDA, NORTH CAROLINA

'SERPENT' INDELIBLE (LEAD) LABELS

LASTS 100 YEARS

NEAT, LEGIBLE, SELF-AFFIXING,
ADAPTABLE, COMPLETELY RELIABLE

The Ideal Labels for Rock Plants

Print your own with the
HAND MACHINE OUTFIT
Send for Pamphlet and Prices

HOME & GARDEN CO.
Box 618, Seattle 11, Washington



DWARF DAFFODILS

for Rock Gardeners

112 Choice Varieties
Old and New Types

Write for our Blue Ribbon List

The Daffodil Mart

Nuttal P. O., Gloucester, Va.

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

Grower of

ROCK PLANTS, HERBS, PERENNIALS *and*

band grown ANNUALS
in separate colors

For sale at Nursery only

SAMUEL F. BRIDGE, JR.
DOUBLING ROAD
GREENWICH, CONNECTICUT

Primula Juliae Hybrids
Choice Rock Plants
Dwarf Shrubs
Iris

Catalog on Request

Carl Starker Gardens

JENNINGS LODGE OREGON

PATRONIZE
OUR
ADVERTISERS

•
THEY
SUPPORT
THE
BULLETIN

RARE ALPINES

from the

WORLD'S FAR CORNERS

Besides Alpines many rare and interesting varieties of Azaleas, Heathers, Primulas and Rhododendron species are listed in our catalogue.

Please Ask For It

ALPENGLOW GARDENS
MICHAUD & COMPANY

R.R. 4, New Westminster, B. C., Canada

80 Varieties

DWARF and ROCKERY
RHODODENDRONS

Gaultheria - Helleborus

Write for list

THE BOVEES

1737 S.W. CORONADO
Oswego, Oregon

Colorful

SEMPERVIVUMS

12 Varieties (labeled)
Prepaid \$3.00

Over 100 Different Varieties

MacPherson Gardens

2920 Starr Ave.

Toledo 5, Ohio



.....

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

OVER 450 GARDENERS *OUTSIDE* SCOTLAND
ENJOY MEMBERSHIP!

(So do about 2400 within Scotland)

\$1.50 Per Year



The Club Journals, published in Spring and Autumn, are well illustrated and packed full of authoritative articles of interest to all keen gardeners — novice or expert.

Overseas members participate in the Seed Exchange by air mail.

J. T. AITKEN, 75 WHITEHOUSE ROAD, BARTON, MIDLOTHIAN, 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

A free 44-page Planting Guide is given with each membership of \$2.50, as well as a subscription to four Quarterlies a year. Volume XII contains a *Pictorial Dictionary of the Cultivated Species of the Primula* and Volume XIII a Pictorial Supplement, besides articles on related subjects, \$2.50 per volume.

MRS. ORVAL AGEE, *Treasurer*

11112 S.E. Wood Avenue
Milwaukie 22 Oregon

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. Edward M. Babb

213 Lambert Street, Portland, 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
- VOLUME 10 (4 issues) \$3.50
Individual numbers 1, 2, 3 & 4
- VOLUME 11 (4 issues) \$3.50
Individual numbers 1, 2, 3 & 4
- VOLUME 12 (4 issues) \$3.50
Individual numbers 1, 2, 3 & 4
- VOLUME 13 (4 issues) \$3.50
Individual numbers 1, 2, 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.