THE JOURNAL

... OF ...

The Scottish Rock Garden Club

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of

The Scottish Rock Garden Club

EDITED BY

KENNETH CHARLES CORSAR

No. 2—1938

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THE SCOTTISH ROCK GARDEN CLUB

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EDITOR'S NOTES

THE first number of "The Journal," which made its appearance in December 1937, met with a kindly welcome from members of The Scottish Rock Garden Club. This was very gratifying, as it is always a little difficult to determine just what is wanted in the way of a society's magazine. It is known and admitted that the "Journal" is far from perfect, but it must always be borne in mind that our Society is, as yet, a small one and that the funds available for printing are by no means unlimited. Even so, it should be possible to produce a publication of a kind useful and instructive to all, whether they be experienced gardeners or newcomers to the hobby of Alpine plant cultivation.

But in order to achieve this desirable end the co-operation of members is necessary. It is felt that there are many who possess valuable knowledge of Alpines and their ways which would be of the greatest assistance to others if only it were made available. For this purpose the "Journal" was brought into being, and for this purpose it exists. We suggest that it is the duty of all members who have information to impart—and there must be quite a number of them—to do so through the medium of its pages. Modesty is one of the outstanding features of our British character, thus we are too apt to underrate our ability to put our ideas on paper. But if this "Journal" is to be a success, and if it is to fulfil its purpose, this natural disinclination to "air our views" must be suppressed. We therefore appeal to all who grow Alpines, either in the Rock Garden or in pans, to hand on their experiences by contributing notes and articles to their own "Journal."

During the year the Club has lost one of its best known and most active members. On February 24th Dr John MacWatt passed away at the advanced age of 81. He had served on the Committee for a number of years and rendered valuable service to the Club both inside and outside the Committee room. The exhibit of plants from his own fine collection which he put up at our first Waverley Market show will long be remembered by all who saw it. As an expert in the cultivation of all manner of plants he was widely known, and many of his treasures have been seen at the leading shows all over the country. As a writer on botanical subjects his name was known throughout the world, and MacWatt's "Primulas of Europe" is now a classic. He contributed many papers to Conferences and Societies, and many articles to the Horticultural Press, his last being an article on hardy Ferns which appeared in the last number of the "Journal," and constituted one of its features. A great enthusiast and a great gardener, he will be sadly missed.

While the number of members continues to grow, the number of those who compete at the annual shows in Edinburgh and Glasgow has not kept pace with it. This is a cause of disappointment to those charged with their organisation and to those who are regular competitors. It is known that many of our members grow Alpines with a rare degree of skill, yet never bring them to the show bench. There is no denying that competition is stimulating and that the keener this is the higher the standard. Moreover, the greater the number of entries the greater the interest that will be taken in the shows, both by the members themselves and by the general public. Already our shows are becoming an established feature in the horticultural life

of Scotland ; it is therefore the duty of all who have good Alpines to bring them forward and so make the 1939 shows bigger and better than their predecessors.

Once again we tender our warmest thanks to all those who have contributed in various ways to " The Journal." But for their co-operation no progress could have been made, and but for their ready response to requests for articles the work of the Editor would have been much harder, if not impossible. We ask for a continuance of this help so that in due course " The Journal " of The Scottish Rock Garden Club may take its place amongst the foremost horticultural publications of our time.

All matter for inclusion in subsequent numbers of " The Journal " should be sent to the Editor at Rubislaw, Braid Avenue, Edinburgh, 10.

Additional copies and back numbers may be had from the Secretary, price 1s. each.

HEATHS AND HEATHERS

By R. E. COOPER

Their Requirements

IT is good to realise that the requirements of heathers in a soil are simple, easy to supply, and cheap.

Heathers are in reality just little scrubby plants with fibrous roots that love to sit in the sun. If they were "psychosed" the verdict would be that they have an inferiority complex which makes them unhappy when they have to sit in the shade of taller neighbours, a reflex based in all probability upon a background of poor food and environments.

As they are to-day, their root system is not only fibrous but the fibres themselves are very thin, while their upper growth consists of a brushwood of twigs closely set with evergreen leaves which look most attractive even in the winter. From this it will be readily understood that the roots can range easily through an open sandy soil or a friable loam, but have great difficulty in getting through an adhesive clay and become suffocated in a bog. Rich food results in longer shoots upon which the leaves tend to be loosely spaced, so that the plant quickly loses its typical character and, becoming leggy, turns unsightly.

When the leaves are shed they work into the surface soil, making a mixture which is rich in humus. Branches which, for some reason or other, are brought into permanent contact with this mixture, root into it, proving that it is a soil that they love and in which they are happy.

This soil, so rich in humus, is called an acid soil and is absolutely the reverse in its conditions to a chalky one, or one in which there is reason to suspect chalk in one form or another. Generally speaking heather is never considered the typical vegetation of a country with calcareous rocks although they will grow, but not well, in a soil in which there is a little lime. Strange as it may seem heather grows at seaside links in turf overlying deep shell banks of old raised beaches, which are undoubtedly a form of lime. It may be that the sea salts have cancelled out the lime, but in such cases there is always a good thickness of turf above the shells and more often than not a block of basalt or granite or other acid rock in the immediate vicinity of the plants.

Now that we have considered how and under what conditions heathers grow and thrive we can turn to our garden. If the soil is a poor sandy loam containing quantities of stones do not despair. On the contrary, rejoice, for such a soil holds better prospects of success than that of a neighbour's garden which is rich, black, and of great depth ; absorbing and holding the rain so that after a sustained spell of wet weather it will ooze water when squeezed. Any ground in which heathers are to be grown must be prepared, and since in the case of heathers the roots are thin and weak the soil must be worked by being dug so that it can be penetrated with ease. It must be worked to a good depth, as a layer of worked soil over-laying a solid subsoil pan, be this of hard dry soil or of wet clay, will have the essential conditions of the surface upset before a season has passed. So that the first stage of preparation of the ground is to loosen the lower spade's depth. The next stage consists of modifying the top spade's depth or " spit " to meet the requirements of the heathers.

A sandy soil only requires about a tenth of its bulk of half decayed leaves or peat moss litter worked into its upper spit when the ground if being prepared for planting. A rich heavy black soil requires plenty of grit, sand or stones worked into it to improve the drainage. To do this, to the depth which is necessary if a subsoil water trapping pan is not to be left, requires lots of grit in the double sense. If only such ground is available, choose a sloping piece for heathers and so take advantage of any natural drainage there may be. A piece which is facing south is better than one facing north or a hollow or flat area where the rain will accumulate and lie. Flat ground can be treated by making terraces and the effect of these can be obtained by the judicious use of any rock, other than limestone.

If the garden soil is a clay the only thing to do (if one cannot get another house) is to trench it two spades' deep and leave high ridges between the furrows for the frost to break down in the winter, applying plenty of sand, grit or chips at the first working after the frost, and at least 25 per cent. of its bulk of rotted leaves and/or peat moss litter at the final working before planting. Lime or lime rubble is taboo.

Above all, remember that the shade of trees or overhanging bushes will spoil any heathers planted in it.

It is taken for granted that Heaths and Heathers are being incorporated into the garden scheme as assets to the glory of it, and not for the sake of making a jay-like collection of mere different forms. It should be realised that although there is sufficient range of shape, colour, and seasonal flower to warrant interest and beauty all the year round, a piece of ground containing these plants only is rather like a display of countless pieces of jewellery in a shop window.

Their charm is enhanced by their setting and surroundings. There is as yet no yellow flowered heather that will grow out of doors, the preponderating shades are purple, so that a contrast of colour is essential. This may be obtained by plants other than heathers, whose habits contrast, whose green is more vivid, or whose flowers or autumn colouring gives the required effects. As this is a particularly contentious subject perhaps the best advice upon it is to take a piece of the foreigner at the time when its character appeals most and place it near one or other of the heather clumps until a satisfactory blend results. After all, in one's own garden one should be able to get away from the conventional

White heather for luck seems to be the first plant to start with. The background for this 'luck' business seems to be no more than that since ordinary heather is purple, a piece with white flowers is unusual and scarce. Its discovery is a piece of good fortune for the finder. In these days of commercial exploitation when white heather is sold by hawkers in the streets of every town, its wearing has become conventional. At the same time it *is* nice to pluck a sprig from one's own garden and give it to a friend with one's personal good wishes.

White Heather—*Erica vulgaris* (*Calluna vulgaris*) *alba*—blooms in August and September and is only a white-flowered form of the common heather, which in these days of 3d. and 6d. stores can be easily and cheaply obtained. In a recent catalogue there are no less than ten varieties of white heather which differ in length of flower spike, habit of the plant and colour of foliage. Circumstances incline '*chacun a son gout*,' but there are three which deserve consideration, *E. v.*

alba, which is a plant of sound constitution, *E. v. a. Hammondi*, which is particularly robust and makes a large bush, and *E. v. a. Serlei*, which blooms later than the others and so helps to prolong the season.

In the same catalogue there are given thirty or so other varieties of the ordinary heather, and this brings forward an interesting point concerning them. Varieties of any plant are departures from the normal. Some occur naturally while others seem to be induced by the change of soil, light and water of their natural environments to the applied conditions of cultivation.

Since they may be considered abnormal it is not surprising to find that at times a plant of a variety may revert in whole or in part to the normal form. When this happens the plant must be propagated afresh, and it is most important when choosing material for this purpose to ensure that the chosen pieces embody the required feature. As we shall not be concerned with propagation until later in these notes the matter may be left for the moment. It is mentioned because it is possible for anyone crossing heather country to find a plant with distinctive character and appeal. It is most reprehensible to uproot the whole plant, but it is possible to root cuttings from it and this, in the case of the majority of forms, is what has taken place. It is quite certain that there are as many other good forms in cultivation as there are listed in catalogues, and while we retain our individuality that will always be the case.

The catalogues show varieties with flowers of more vivid or paler colours than the normal, early and late flowering varieties, giant forms of three feet and dwarf forms of two inches, upright, flat, trailing and compact forms and forms with foliage which is tinted golden yellow or bronzy copper or dark red.

In addition, for those who like such things, there are double flowered forms, one of which produces flower spikes over one foot long. Each year brings new forms and varieties so that instead of making these notes resemble a catalogue it is suggested that the publications and exhibitions at shows of the growers of heaths and heathers be collected and studied.

Bell Heather is as different to plain heather as chalk is to cheese. It is common on the Scottish, Irish, Welsh and some English moors and in western Europe.

The flowers of heather gradually broaden from their base and develop a trumpet-like form. Bell Heather flowers swell out and then close in, to make small balloon-like shapes. This plant—*Erica cinerea*—is also called ' fine leaved heather ' because the leaves are very fine and tightly rolled.

It is the plant of drier, hotter and sandier positions than other species and makes a mass of any size up to two feet in both directions, of slender branching stems of uniform growth. The leaves are a brighter green than heather and set off well the clear, purple, globular flowers which are borne in groups at the ends of the branches from June to September. Its position in the garden can be of the sandiest and sunniest, while the importance of the best drainage can be readily appreciated. The response of this plant in various situations has resulted in about thirty varieties being listed, these embracing a range of shape of bush and colour of foliage and flower which rivals the common heather.

Heather flowers from August to September, but as its glory begins to fade from the garden the Dorset Heath carries on the show.

The Dorset Heath, *E. ciliaris*, grows naturally and profusely between Wareham and Corfe Castle, in the

Isle of Purbeck, on undulating moorland about those inlets from the sea called the Dorset Lakes. It is also found in Cornwall, Western France, Spain and Portugal. It has a trailing habit and will form clumps two or three feet across and about a foot high.

It is distinguished by its ovate leaves, which have a fringe of hairs at the edges (hence the name *ciliaris* or fringed). These are set closely in whorls of three on thin branches. The hairiness of the foliage tends to give it a grey-green appearance. The flower's colour lacks the blue that makes the heather purple, and in consequence it is of a rich pink ; they are produced in threes down the length of the last three inches of stem and are large (nearly half an inch long), pitcher-shaped, nodding bells.

There are nine varieties of this species listed, the range again providing forms with white flowers, golden foliage, globular flowers, differing habits and range of flowering—one called *E. ciliaris hybrida* is said to have so long a flowering season as from June to October.

Although *E. ciliaris* grows in boggy ground this fact does not mean that it will not do better (as it does) in well drained soil, though it may prove to be more suitable in a moister spot in the garden than another species.

If *E. ciliaris* flowers up to October and another species is said to flower from December onwards it does not mean that there is a period without flower, because later forms of the one and earlier forms of the other will reduce the gap between the two. There are also hybrids which combine the two, but these are worthy of consideration only after the species have been first considered.

Flowering about the same time as *E. ciliaris* is the Cross-Leaved Heath, *Erica Tetralix*, a well-known

moorland shrub of West Britain, which is also to be found in the West of Europe, where it extends through Sweden, North Germany to Livonia. The habit of the plant is lax and spreading, but this must not be construed as sprawling, because in effect it is compact and shapely and about ten inches high. The leaves are set, as the name suggests, to form a cross, the underside being of a lighter green. The amount of downiness on the leaves varies so that forms are to be found which are almost silver grey. It produces clusters of six or more drooping flowers at the ends of the twigs in the months from June to October, all facing out from the centre of the plant. They are shaped like little fire balloons, the colour being a bright rose-pink. As this plant is found in wet moorland, it will grow quite well in a moist position, but responds as satisfactorily to ordinary cultivation. There are more than a dozen varieties listed with the usual range of flower colour and forms, but with a limited range through grey greens of foliage, and much less range in size or shape.

As the flowering of the Common Heather is drawing to its close in September another heather is preparing its flowers to open in the winter and spring. This is *Erica carnea*, the Alpine Forest Heath of Central Europe, where it grows often on the floor of thin pine forest, often covered by snow, and the flowers unfold as soon as this melts. For this reason it is called the ' Winter Flowering Heath.' The name *carnea* means ' flesh coloured.'

E. carnea is a low-growing plant which makes a dense mat of growth over the ground and grows to a height of about nine inches. The leaves are pale green and usually in fours, while the flowers which commence to emerge in December and continue in our snowless

winters until April, are a bright rosy carmine with dark purple anthers. The dark stamens show most effectively in the lighter (white to pink) flowers and the white form *E. carnea alba* makes an effective foil to the richer colours. More than twenty varieties of this species are known to commerce and provide a range of colour through white and pink to very rosy carmine, a range of foliage, greens to bronze, and various forms of habit from compact to trailing, to meet every requirement of character and situation in a planting scheme.

All the Carneas, as they are called, should be planted on raised situations, because, apart from this situation approximating that of the plants' natural habitat, the habit of some of them, particularly that of the white-flowered form, is semi-procumbent and the flowers are apt to be spattered by soil during rainy weather. Incidentally the Carneas are tolerant of a little lime in the soil and so have perhaps a broader sphere of usefulness in gardens. They can even be grown as edgings to a border.

From Cornwall comes the Cornish Heath—*Erica vagans*, which in places there grows so strongly as to almost entirely supplant the other three common heathers. It is also indigenous to Asia, Egypt, South Europe and Ireland, and seems to be aptly named as the ' Wandering Heath.' At its best it can make a fine bush more than waist high and thrives on dry sunny slopes and gravelly banks where it makes a neater habit and produces more flowers than when it is grown in situations with more moisture and richer soil. The flowering season is from late summer into autumn, and each shoot bears crowded clusters of flowers at its apex. When these have faded the masses of rich, warm, brown flower heads are still remarkably decorative. Their

addition to the effect of autumn tints gives a unique effect among the sombre greens of the other heathers.

About a dozen forms are listed and this includes a range of colours from brilliant cerise to white and a small range of growth forms.

This species is the largest of the British Heathers and may almost be said to belong to the group of tree heaths. These together with hybrids and the question of propagation will be given in a following chapter.

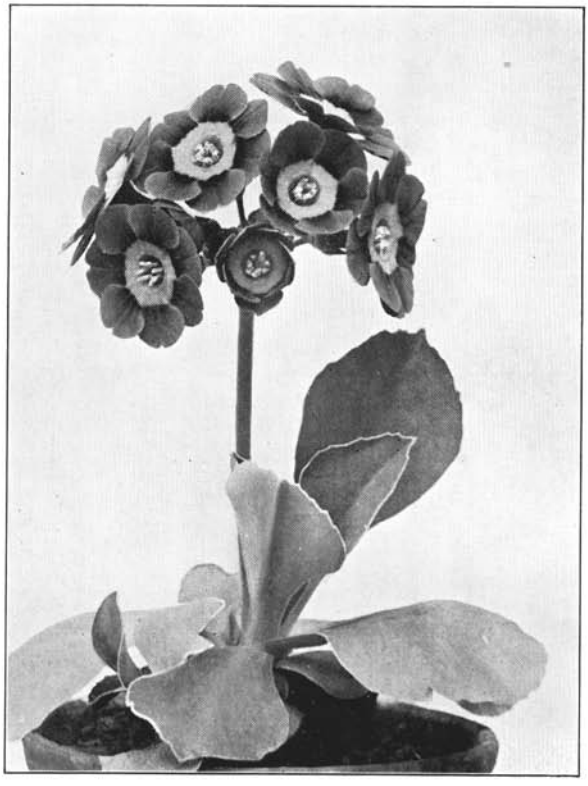
DEFINITION OF SHOW AND ALPINE AURICULAS

AS some doubt appears to exist as to the difference between an Alpine Auricula and one belonging to the Show section, the following explanation is given. The show Auriculas are classified under four heads, namely, Green-edged, Grey-edged, White-edged and Selfs. In the first class the flowers, or pips, have a well-defined green margin with no powder on it. The leaves also are powder free and dark green in colour. In the second and third classes the edges of the pips carry a greater or less amount of powder, which is also to be found on the leaves. In the section known as Selfs the margin is of one unbroken colour only, red, maroon, violet and yellow being the common colours ; but in all cases the centre must be white.

There are two distinct types of Alpine Auricula, those with yellow centres and those with white. In the first group the margin colour is maroon, crimson, red in various shades, and bronze. The colour is darkest in the centre, shading to a paler tint at the margin. The colours found among the white centred varieties are claret, lilac, all shades of purple, and blue. They are shaded as the above. No powder is to be found on the flower scapes or leaves of Alpine Auriculas.

In all classes the edges of the petals should be free from notches, the centres should be circular, and the eye filled with the anthers.

K. C. C.



AURICULA.

THE RETICULATA SECTION OF IRIS

By W. G. MACKENZIE

AS a genus Iris holds a very high place in our gardens, none the less so in the Rock Garden where, as one would expect from such a large and varied race of plants, many are admirably suited.

As space will not permit me to deal fully with Iris suitable for Rock Garden cultivation I will confine my remarks to one of the sections known as the "Reticulata Section" which has as its head-marks a network of fibre as a covering to the bulb, and foliage in most cases narrow and four sided in section.

Their place in the garden is a very definite one, coming into flower as they do at a time when flower is scarce. *I. Vartani* is the first to show flower during the latter part of December, from then onwards a succession is maintained until finally *I. reticulata* and its variety *Cantab* bring their season to a close in late March or early April.

Their beauty is best appreciated by seeing them, not only for their colour but also for their neat and dwarf habit which is a point to be noted by the small Rock Gardener.

For the beginner I would recommend *I. histrioides major* for early flowering and *I. reticulata* and its variety *Cantab* for late flowering.

The cultivation of those Iris in most cases presents no difficulties providing a little time and consideration is given in the preparation and selection of suitable positions. The ideal is one in full sun where the bulbs get

thoroughly ripened in summer to build them up for flowering the following year. Protection where possible should be considered from winter winds and rain so that the fragile flowers and foliage remain perfect over as long a period as possible.

A suitable compost is one that is rich in humus in the form of well decayed leaf soil or pulverised peat, with a good percentage of lime rubble and sharp sand. This mixture made up in the following proportions, three parts loam, one part humus, and one quarter part lime rubble and sand will give a good growing medium.

The bulbous Iris will certainly respond to feeding, but not of an artificial nature, so the aim should be to make a compost with sufficient body and yet with the maximum amount of drainage, that body to be made up with good loam leaf-soil or peat.

Particular attention must be paid to the drainage as herein lies either failure or success. This must be sharp and free, for at no time must excessive moisture lie round the bulbs. During bad weather protection may be given to prolong flowering and at the same time keep the flowers clean, by covering with a sheet of glass or cloche. This may also be used in summer to advantage with the less hardy types to encourage thorough ripening.

Those bulbous Iris may be raised from seed sown under cool conditions and grown on to flowering size, which will take from three to four years. They may also be increased by division which is best done after the foliage has completely ripened. On lifting, various sized bulbs will be found, the larger of which may be immediately planted or stored in dry sand till September. The smaller bulbs can be lined out and grown on. Lifting in this manner should take place every two

to three years as it not only relieves congestion but also goes far in preventing disease.

I. Bakeriana. A native of Armenia, first collected in 1889, and, unlike the others from which it may be easily distinguished, has eight sided leaves, not four, as is the case with the majority. The flowers overtopping the 4-6 inch leaves are first seen in February. The blades of the falls are an intense violet the centre of which is creamy white, dotted and flecked with purple. It is a good grower and may be left undisturbed for years as the flowering bulb splits, giving rise to two or three bulbs which may flower the following year.

I. Danfordiæ. Though in cultivation for some thirty years it is still a stranger to many gardens, due no doubt to the fact that it requires a little special attention to maintain it in good health. Like *I. Histrio* and *I. histrioides* it increases by offsets which if potted in a light humus compost will reach flowering stage in two to three years' time. Growing at an altitude of 4000 feet in its native home in the Taurus Mountains it is undoubtedly hardy, but care must be taken to see that ample drainage is given. The foliage which ultimately reaches a height of twelve inches appears with the beautiful bright yellow flowers with brown flecking on the falls. An outstanding plant flowering January to February and equally suited for Rock Garden or Alpine House.

I. Histrio. Though easily grown, the fact of the foliage appearing in mid-winter causes it to suffer from winter gales and frosts so that care should be taken in choosing a well sheltered corner and protected if need be by a sheet of glass. The outstanding purple-blue

flowers are neatly marked with deep purple spots and a distinct yellow band in the centre of the fall fading to white towards the throat. It may be distinguished from *I. histrioides* by the foliage appearing before the flowers and the falls tending to rise, instead of being set horizontally. It is a native of Asia Minor. *Var. aintabensis* is a very attractive form having pale blue flowers with a bright orange centre. Smaller than the type but appearing to grow and increase readily out of doors.

I. histrioides. This is the variety most commonly grown in gardens and if given a well drained sunny spot it will go on increasing from year to year. It flowers in late January before the foliage appears. The colour is a bright blue, the falls being blotched and veined with a deep purple blue ; and the centres have an orange-yellow band set on a white ground. Named from its likeness to *I. Histrio* it is altogether a very pleasing plant from North Asia Minor. Var. *major*, a stronger and larger flowered form which, like the type, should be given a place by all bulb lovers. Var. *sophenensis*, inferior to either of the above, having dull coloured flowers and smaller growth.

I. Kolpakowskiana. Though introduced from time to time it appears to be short lived in our gardens. Coming from Turkestan it requires perfect drainage and thorough ripening in summer. The flowers are deep purple showing two narrow yellow bands running towards the throat. The foliage is very distinct resembling that of a Crocus.

I. reticulata. The type of the section, and though it has now been cultivated in our gardens for over a

IRIS RETICULATA CANTAB.

IRIS HISTRIODES MAJOR.

century it still ranks as one of the best of the bulbous Iris. Given suitable conditions it will go on increasing indefinitely. The deep violet flowers with orange markings on the falls are borne on stems six to nine inches in height. Flowering in March, it brings to an end a season which would be very dull and uninteresting but for the appearance of our spring flowering bulbs, in which Iris play a very important part. It is a native of the Caucasus.

I. r. var. *Cantab.* Though the origin of this plant is uncertain it is nevertheless a first-class garden plant. Similar to *I. reticulata*, but in colour it is a pale Cambridge Blue, it appears in late March. *I. r.* var. *Krelagei.* Smaller than the type with reddish purple flowers, which appear in February and, despite the weather, always make a good show.

I. Vartani. This is best treated indoors flowering as it does in December. Grown outdoors it has little opportunity to show off its beauty or to build up bulbs strong enough to flower the following year, the foliage suffering so much with winter frost and gales. However, it makes a welcome addition to the Alpine House where the sweetly almond-scented flowers fill a gap. In colour it ranges from slaty blue to grey with variable markings. The foliage overtops the flowers which are carried on stalks four to six inches in height. A native of Palestine it is regarded as the southern form of *I. Histrio.* Afforded protection indoors and a well drained soil, and above all a thorough ripening in summer, it will prove itself worth the little care and attention given.

I. v. var. *alba.* Is similar to the type with white flowers.

I. Winogradowi comes from Georgia and is of recent introduction. Allied to the Reticulata Section it should be treated as such, but until more is known about it, it will be wise to grow it indoors. The pale yellow flowers appear in spring and show an orange-yellow ridge down the fall which is spotted with black.

I. Winkleri. Has yet to be introduced into cultivation from Turkestan. The narrow leaves appear with the purple flowers but ultimately overtop them.

ROCK GARDEN PLANTS

By Mrs CICELY M. CREWDSON

A FEW notes on the rarer and more difficult Alpines that I try and grow in my garden in Westmorland may be of interest to some members of the Scottish Rock Garden Club :—

PRIMULAS. The early flowering *Primula Winteri* and its white form *P. Winteri alba* are two of my favourites, brightening the garden in February and March, and they do exceedingly well in the conditions which I can give them, viz. :—good drainage, plenty of leaf mould and peat, and slight protection from winter wet.

From the two or three plants which I originally purchased, I have now about a hundred, mostly grown from seed. Previously I have always grown these Primulas underneath an over-hanging lime-stone rock, but this year I have planted out a number of seedlings on a sloping bank facing due north, and it remains to be seen how they will do.

Primula scapigera, which comes from Western Sikkim, seems equally amiable, and the ease with which you can increase this species from leaf cuttings makes me hope that I shall have plenty of these too before long.

Primula Clarkei is a newcomer from Kashmir, and is a most dainty little Primula producing in March or April pure pink flowers, without that blue colour in them which brings the word " magenta " at once into one's mind. The leaves lie flat on the ground, and are quite small, So far I have only risked one plant out in the open, but it appears to be perfectly hardy, and is easily increased by division.

Primula Reidii is another treasure which has survived and bloomed for three years in the river-sand scree.

Primula hyacinthina G. S. 2294 flowered with me for the first time this year, and is a very valuable addition to the

rock garden, for it seems definitely hardy. It produces leaves like those of a primrose, then tall stems arise and are headed by clusters of lavender-blue flowers.

Other Primulas that do well here are the beautiful *P. nutans* from the Soldanelloides Section, which is best in sheltered nooks. *P. aurantiaca*, *P. sinoplantaginea*, and *P. chionantha*, which are all growing on a bank facing north and seem to thrive in these somewhat damp and shady positions.

GENTIANS. Some Gentians do well with me and some do not !

Gentiana acaulis and *G. verna* flourish now I have learnt their likes and dislikes.

Gentiana saxosa and *G. bellidifolia*, the white Gentians from New Zealand, seem quite happy in a granite scree in full sun.

Gentiana Kurroo (though always inclined to be spoilt by the ravages of slugs) blooms in August and September, the rosettes of dark glossy green leaves producing long stems which bear blue tubular flowers. This year a variation occurred, as one plant gave me delicate pale blue flowers which were extremely pretty. This Gentian seems to prefer an open situation in the sun with plenty of water in the growing season.

CYANANTHUS. These do well in plenty of leaf mould, grit, and river sand. *C. lobatus* is easily grown, the one formerly known as K.W. 5949 is now known as *C. insignis*, and is one of the very best late summer flowering plants for the rock garden ; but the one which to my mind is outstanding in every way is *Cyananthus integer*, which was re-introduced into this country in 1933 from Northern India. It is wonderfully pretty, seems to thrive in almost any position and flowers continuously all through September and October. The flowers are a clear blue, and it is bearded with pale blue silky hairs at the throat. The only fault I can find with it is that I can never find any seed.

A still more recent introduction is *Cyananthus Sherriffii*, discovered by Ludlow and Sherriff in 1936 in Bhutan. I have

LEWISIA BRACHYCALYX.

GENTIANA BELLIDIFOLIA.

recently been given one precious plant of this species, and I have seen it in bloom. The flowers are similar to *C. integer*, though somewhat larger and the basal tufts are more hairy, and it starts to form these tufts at a very early stage.

LEWISIAS. Many people do not care for Lewisias, thinking perhaps that they are too fleshy and opulent looking, but I confess that I have a great fondness for them, and a large group of them in the rock garden makes a striking effect.

Lewisia Tweedyi has such fragile and lovely apricot flowers that almost every one must admire that species.

Lewisia Howellii and *L. Finchae* flourish out in the open facing south, and seedlings appear all round them in the early spring.

Lewisia rediviva and its still more beautiful sister " Winifred Herdman " need as much sun and baking as you can give them after they have finished flowering, and I fear that my plants have suffered this summer from the incessant wet. I have never been able to grow this species in sufficient quantities to try eating it like a parsnip, as I understand the Indians do in its native haunts.

Lewisia brachycalyx is one of the most beautiful, and is not difficult. It has narrow tapering leaves which lie close to the ground and the stemless flowers are faintly tinged with pink. Though perfectly hardy outside (only requiring to be kept moderately dry in winter and to have plenty of water in the growing season), the delicate texture of the flowers makes them often suffer in the variable spring weather and pans in the Alpine house are safer.

MECONOPSIS. Many Meconopsis are unsuitable for the rock garden, and the tall monocarpic species such as *M. betonicifolia, M. integrifolia, M. nepalensis, M. regia, M. superba, M. violacea* and *M. longipetiolata* are best planted among Rhododendrons or in woodland conditions, but others which are polycarpic, *Meconopsis quintuplinervia*, and the Sikkim *grandis*

can be used with great effect in the rock garden. I have the smaller *Meconopsis Delavayi* growing happily in a limestone scree and this has glorious purple flowers, and I have some treasured plants of *M. bella* of which only one has flowered as yet. This little Meconopsis almost takes away one's breath with its gracefulness and beauty, and a delightful pan of this species was shown by Mr Cooke at the A.G.S. Show this autumn.

Meconopsis discigera, which has done well here, is a beautiful thing ; its only fault is that it is another of the monocarpic species. It hails from Nepal and has deeply lanceolate leaves which are remarkable for their rosy purple veins, and this characteristic is more noticeable in some plants. The flowers are an almost indescribable colour of pinky mauve which shines in the sun like satin.

I have had two other interesting Meconopsis in flower in my garden this year, one a pure white hybrid between the Nepal *grandis* and *integrifolia*, which should I suppose be called *M. Beamishii*, and the other a plant of *M. simplicifolia* K.W. 012392, which produced flowers with petals of a rosy pink colour.

SINKS. I have a small paved garden where some old limestone sinks are planted with various alpines. This method of growing them has been so often described that there is no need for me to say more than that I find they do exceedingly well in these quarters ; good drainage is always essential, and the top-dressing and chippings can be of lime, granite or river sand as best suited to the idiosyncrasy of the Alpine to be planted.

The New Zealand Forget-me-not, *Myosotis decora*, with little white flowers, flourishes in a limestone sink, and the comic little tawny *Myosotis macrantha* does well in river sand.

Leucogenes Leontopodium is a silvery leaved Edelweiss which is giving me great satisfaction from the way it has settled down and is increasing in a trough.

THE NEW ALPINE GARDEN.

LIME OR NO LIME

Capt. H. P. LESCHALLAS, M.B.E.

THE question of lime is an interesting one covering a wide range of soils or composts for plants which it is not intended to go into in this article. Some time ago two Small Alpine Gardens were constructed, one lime free, the other of limestone gravel. It soon became evident that the former was generally more effective and all ideas of lime were forgotten when making a new Alpine Garden (scree garden), a little additional Sorbex being added where the so-called lime-haters were to be planted. This has since been found unnecessary. It became quite obvious that lime was in no way an important factor in Alpine growing, and that the number of plants which are supposed to thrive only in limestone soils, even in soils heavily impregnated with lime, will grow equally well in soils in which no lime is present, in many instances they really get none owing to the lime being in an insoluble state. This is why one hears of lime-haters growing in limestone regions. There are of course the acid peat loving plants, *Ericaceæ*, &c. These need not be considered, but there are also others which tolerate or grow in it.

I was not only greatly surprised recently but interested to find that Messrs Sutton & Sons have worked on similar lines with plants generally and carry the argument still further that " there are of course plenty of plants which flourish in soils containing lime in its natural form, but if an attempt is made to grow the same plants in soil which contains no natural lime, to which lime is added, the result is often disastrous, such

plants gowing better in slightly acid soils than in those to which lime has been added." The net result being that we both had come to the same conclusion—the use of one mixture for all plants. The success of the one mixture for all Alpines led to experiments which are likely to revolutionise the growing of Alpines in the open ground, reducing the cost of preparation to a mere fraction of what it has been with 75 per cent. or probably 95 per cent. more efficiency.

Some time has still to go before the experiments can be deemed successful ; the success in pot culture leaves little doubt. All being well in the spring, Part II of my book, " The Small Alpine Garden," will be published in which will appear full details.

CYANANTHUS INTEGER.

GENTIANA KURROO. Pale blue form.

S.R.G.C. SUMMER MEET

By Mrs J. Hally Brown

SATURDAY, May 28th, did not promise very much to us in the way of weather as we assembled at Bridge of Earn for our week of garden visits, but the rain of that day gave place to sunshine when we awakened the next morning, and our hopes rose. On the whole the week was kind to us ; there were showers which drove us to shelter under trees from time to time, but only one day was really pitiless, and even that did not succeed in damping our enthusiasm, although it was hard on our kind hosts, who not only piloted us through the downpour, but subsequently admitted the dripping crowd to their houses, and catered nobly to the inner man !

This article is bound to be inadequate, and I apologise to the garden owners and to my fellow-members : no one person should attempt to write it ; it should have been compiled by the whole party, if anything approaching justice to the gardens visited be done, but when it comes to the question of gratitude for and appreciation of the great kindness of the owners of the beautiful places we saw, one voice can speak for all, and I ask such of our hosts as may read these words to see in them a notation of a chorus of gratitude, sung in unison.

Monday, May 30th, Glendoick. Will any of us ever forget our arrival there, with Mr and Mrs Cox and Mr Euan Cox waiting on the steps to welcome us? The beauty of the place took on extra lustre from the

friendly warmth of our welcome, and when Mr Euan Cox gave the signal for us to follow him up the Glen we fell in like happy children.

My notes of what interested me in that walk are too long to quote in full (indeed this applies to nearly all the gardens visited), but Acers bulk largely in it. We were too late to see the Rhododendron species at their best, but there were many colonies of Meconopsis, in variety (particularly do I recall the finest *M. violacea* I have ever seen) scattered through the open woodland. The great interest of the place was in its complete naturalness; as Mr Cox said, no coddling is indulged in, if a plant cannot establish itself after skilful planting it must go. To any one who has a "Wild Garden," large or small, I commend Glendoick as an example of how to treat it.

Mr and Mrs Cox awaited our return to the house, and a talk with them over a glass of sherry terminated our first, very happy visit.

The afternoon saw us at The Laws, where, alas, the owner, Mr Sandeman, was no longer visible. To many of us, however, I think that his presence in the garden he loved was felt, unseen but welcoming. Mrs Sandeman, who was in London at the time, had nevertheless arranged for our reception, including a very welcome and lavish tea, for which we were more than ready after our open-mouthed, gasping inspection of the cliffside rock garden and the Primulas. Is there any other place in the world which can show more rare and lovely Primulas growing so happily?

The next morning saw the caravan of cars on the road to Devonhall, where Mr Harley met us. His first words were of apology, "The frost has ruined everything;

there is nothing to see ! " But while we mourned with him over obvious damage to Rhododendrons and other shrubs we did not agree on the " nothing ! " Nomocharis, for instance, those nodding pink beauties—and Meconopsis of every variety plus many hybrid forms—and will any of us forget quickly the way *Lewisia Howellii* grows with him ? Yes, there was plenty to see and envy at Devonhall !

The afternoon's visit was to quite a different type of garden, the Japanese one at Cowden Castle, a lovely vista of greenest velvet, sloping to a lake, of conifers and other trees pruned and trained by a master hand, but our visit there was curtailed by rain.

Wednesday, June 1st, gave us sunshine and showers, but the latter didn't do more than make us scuttle to shelter under big pines from time to time, for we were at Cromlix with Lt.-Col. Hay Drummond, that kind and enthusiastic host. It's a big place, Cromlix, full of interesting things to arrest attention, yet full also of a spacious peace, so that one can wander dreamingly, conscious of beauty all about, of botanical interest, but with a mind soothed and at rest. And then there was that glorious seedshed, where we were invited to name our choice !

After a roadside lunch, we drove to Ochtertyre, near Stirling, where Sir Walter Scott once lived, where Burns visited, but where our very good friend Lt.-Col. Dundas is now Laird. It was good fun there, for his rock garden is in the making, and thus nearer to our own efforts ! Even so he could show us many subjects new to most of us, and others which brought a pang of envy to at least one heart ! The rock garden being small for so large a party we took it in turns—the hungriest

botanically seeing it first, the hungriest gastronomically doing full justice to the delicious tea Mrs Dundas gave us.

Thursday—alas, how the weather went back on us ! Cold and pitilessly wet, with a strong wind, but it takes more than that to discourage Gardeners ! Poor Captain Neish, he must have had some house cleaning to do after we left, since wet and muddy as we were he yet allowed us to run in and huddle by his fire from time to time ! That was a surprise to us all ! his letter, agreeing to our visit, had proclaimed his garden to be a self-made one on a bungalow plot, and I think we all expected to see the backyard of a building scheme house. Instead, we found a delightful bungalow on an old place, with a perfectly amazing rock garden all about it, some of it four or five years old, some just getting established, the rest new born, and the whole of it planted with most exciting stuff which set pencils scribbling on wet note-books.

There was no picnic lunch that day ("Thank goodness ! ") for Mrs Henderson took the whole drenched lot of us to her home in Dundee, and gave us a very welcome and delicious hot lunch. After it, the rain having stopped for the moment, we had a glimpse of her garden, enough to show us how skilful planning can make a lovely and spacious garden out of a town lot.

Then came the last visit, to Mr and Mrs Renton of Perth. " 'Nuff said " ? How do they do it ? Hard work—yes, but lots of us work hard in our gardens, without achieving a Branklyn ! They are so friendly, so helpful, one goes there and gets all the " tips," yet even after following them how many of us can grow plants as they do ? I believe it rained while we were there, but did anyone mind ? Another luscious tea was

given us (they do have good things to eat in that district !) in their lovely house, despite our bedraggled condition, and with that the garden part of the week came to an end. Not quite, however, for there was another garden which, so far, has become not only jolly but informative. It was with real regret that we all parted, and (if I may be allowed) I, as organiser of the week, should like to take this opportunity of thanking all those who attended the Meet for their co-operation, their kindness in every way, all of which made the week a real pleasure to me.

PLANTS AND PROBLEMS

UNDER this heading it is hoped to give notes in each issue of "The Journal" on a few of the more interesting and unusual Alpine plants. Members are invited and appealed to to co-operate in making this section a success by contributing brief notes and experiences of such plants.

We know that there are books and publications of all kinds dealing with plants and their cultivation, but it is astonishing how many interesting and attractive plants are omitted from our collections, and it is only when we are suddenly confronted with them growing happily in some other garden or Alpine house that we realise their beauty and beg for a cutting or seed.

It is therefore hoped that members will assist the Editor by sending to him notes or photographs of any plants answering this description.

Then there are plants which are known to be of easy culture in one garden, but which perhaps in a neighbour's garden, in apparently similar soil and conditions, either will not grow or they may grow but refuse to flower. These might be called "temperamental plants," requiring some special form of encouragement, and an exchange of views through the medium of "The Journal" would prove of great interest.

Members might also give their experiences regarding plants which are definitely known to be perennial, but which in cultivation are, if not biennial, at least short lived and difficult to keep alive after the first time of flowering. Many of the very fine Asiatic Primulas, such as *P. nutans, P. cockburniana, P. sinoplantaginea*, &c., &c., answer this description in most gardens.

GENTIANA SAXOSA.

There is also great scope for giving assistance to each other in regard to the numerous and ingenious labour-saving devices and things which we might term garden and Alpine house " gadgets." Notes on these would be invaluable and of great help to the members of the Society.

In the Alpine house at Branklyn, Perth, we were introduced to the Alpine house " Tea trolley." It is a plunging bath for pans and pots built on the principle of a tea waggon. It consists of a rectangular galvanised bath 3 feet long by 2 feet wide and 10 inches deep set on iron supports about 2 feet 3 inches high, having 4 small solid tyred swivel wheels. This enables several pans or pots to be plunged in water at one time and it can be readily pushed about where required. A plug in the bottom of the bath permits easy emptying. At Branklyn too the whole of the outside cold frames are raised up to a convenient height of about 2 feet 6 inches on sleepers filled in between with ashes. The frames are thus easily accessible and render the lifting of boxes, plunging of pots and examination for slugs and insect pests very convenient.

The above notes indicate the type of information desired, and it is earnestly hoped that members will support the Editor's wish to make this section of " The Journal " as useful and helpful as possible.

Gentiana saxosa

This interesting gentian hails from New Zealand and is an attractive and easily cultivated plant which should be included in every collection. Seeds germinate freely and plants reach flowering stage in the second year of growth. It is of prostrate habit with shining evergreen

box-like foliage and the flowers which appear in August are white and cup-shaped with a greenish veining. It appears to enjoy a well drained gritty soil, but it is evidently not fastidious and grows equally well in the cool scree where it retains a more compact habit.

The accompanying photograph taken at Branklyn shows plants flowering three years from seed, but the same plants also flowered in the previous year.

J. T. R.

Saponaria cæspitosa

Saponaria cæspitosa comes from the Pyrenees and makes mats of glossy pointed foliage with sprays of chalky pink flowers. It grows well in the scree where it flowers freely. Although reputedly a lime lover, lime is not essential for its cultivation. It can be propagated from seed or grown from cuttings. It is a plant beloved of slugs, and it is wise to occasionally put a small heap of slug bait in the form of meat and bran beneath a stone beside the plant.

J. T. R.

Calceolaria tenella

This native of South America was first introduced about 1873, though it is only within recent years that it has become at all widely known. It is worthy of a place in any rock garden where it can be given a cool and sheltered corner. As a subject for the Alpine house it is first-rate, quickly covering the surface of the pan with its compact creeping growth. From this carpet of bright green foliage rise numerous stems two inches high bearing several clear yellow flowers apiece marked

with chocolate-brown spots. A cool retentive soil suits it best, and if grown in the open the protection of a sheet of glass in winter is appreciated. When pan cultivation is adopted it will be found necessary to renew the soil annually as the roots work on the surface only and soon exhaust it.

K. C. C.

Primula viscosa form cynoglossifolia

This Primula was shown at the 1938 Edinburgh show of the S.R.G.C. under the designation "natural hybrid." It has now been identified as a geographic form of *P. viscosa*. The leaves are smaller than those of the type, they are oval and entire, and peculiarly sticky. The flowers, purplish blue in colour, are borne in clusters on scapes three to four inches high, the whole cluster being on one side of the scape. This is not a difficult Primula to keep alive, but it is rather shy of flowering. A good gritty soil seems to suit it best, and it enjoys a position in full, or almost full, sun. The increasing of stock is a little difficult as offsets rarely appear, and owing to the fact that the flowers are self-sterile, and therefore must be polinated by hand, seed is produced in small quantities only. *P. viscosa* form *cynoglossifolia* is a native of the Maritime Alps.

K. C. C.

Geranium Renardii

This plant was collected in the Caucasus in 1936 by Doctor Giuseppi and others. The leaves, three inches high, are of a pleasing dull green and very uncommonly marked in segments. The flowers up to two inches across are whitish with fine mauve veinings.

Here in Yorkshire, many plants were tried in the Alpine house and in frames, but when treated thus they lost their leaves in winter and failed to flower. When grown in the open rock garden they kept their leaves and flowered well. The best plant, twenty-four inches across, had thirty-four flower stems ten inches high in May. It is planted in full sun and exposed to the prevailing S.W. wind. The soil is a scree, with a little clay and leaf mould added, and the drainage is perfect. We give the plant plenty of water in April and May.

A. NICHOLSON, Rawdon Hall.

PRIMULA MOOREANA

This Primula is planted at the foot of the rockery, facing East. The soil mixture consists of equal parts of fibrous loam, peat, leaf-mould, and sharp sand or other gritty material. To this is added one shovelful of burned ash and spent hops to each barrow load of the mixture. The growth, the number of flowers and their size and colouring have given us great pleasure.

Plants of *Primula nutans* grown under similar conditions look healthy, but produce few flowers.

A. NICHOLSON, Rawdon Hall.

WHITE HEATHER

A Note

THE story of white heather goes back to the heroic days of Fingal, when the Fianna dwelt in our glens and moorlands. Fairest among maidens was Malvina, muse of Alba, who guided barefoot the aged Ossian, holding in her hand the harp of inspiration. Under her care the great bard used to wander by peat brown streams, and on hilltops swept by the breezes he poured forth his deathless lays.

Malvina was betrothed to the strong-limbed Oscar, whose heroic deeds were renowned throughout Alba. Many a time he had crossed the sounding waters of Innistore to aid the Fianna in their battles, and his flashing sword had always brought him victory. Then at last he was treacherously decoyed to Cairbra's banqueting halls, and there murdered by seven chiefs.

As he lay dying on a bed of purple heather, one of the Fianna drew near. To this man Oscar entrusted a sprig of the rich bloom, already dyed a dark crimson by his ebbing life-blood. It was carried sorrowfully to Malvina, waiting in an Alban glen for her lover's return.

The beautiful muse uttered not a sound when the messenger told her his dreadful tale. Her eyes filled with scalding tears, and as she bent her head in an agony of grief, they fell upon the sprig of purple heather. In a moment the colour faded and the flowers became of dazzling whiteness.

On and on wandered the sorrowing girl, and wherever her tears fell on purple heather white blooms

appeared. Turning to the broken-hearted messenger she culled a spray of the magic heather, and as she gave it to him, said mournfully, " Take this emblem and cherish and wear it in memory of Malvina, the Muse of Alba, and of Oscar, her betrothed, your chief, who is no more."

SPRING SHOW 1938, GLASGOW

THE SHOW was held in the McLellan Galleries on 13th and 14th April. In spite of the difficult season the quality of the exhibits in the competitive classes was as high as ever and many interesting plants were brought forward.

The following six plants, exhibited by Mr DARLING, Port Glasgow, were awarded the Dr Buchanan Trophy —*Lewisia Tweedyi, Sax. Stuartii rosea, Lewisia hybrida, Andromeda selaginoides, Sax. Griesbachii* Wisley form ; *Rhododendron imperator.* The latter plant was also awarded the Forrest Medal.

Second in the competition was Mr ARCHIBALD, Ogscastle, Carnwath, with *Rhodo. racemosum, Polygala Chamæbuxus purpurea,* a very well grown specimen, *Anacyclus depressus, Primula* " Linda Pope," *Draba bryoides imbricata,* and a very nice pan of *Lewisia brachycalyx.*

The third prize gained was that of Mr J. E. SMALL, Callander, who showed *Lewisia Tweedyi, Lewisia* " Well's Hybrid," *Sax. Stuartii, Primula* " Linda Pope," *Primula albo-cincta,* and *Sax. Griesbachii* Wisley form. The latter plant was very good.

TRADE EXHIBITS

Messrs LAIRD & DICKSON, Edinburgh.

Some very fine dwarf Azaleas and nice plants of the rare *Primula scapigera.*

Messrs R. K. GEMMELL & Co., Glasgow.

Alpines and shrubs, *Gentiana verna* in fine form, and *Rosa Rouletti* in full flower.

EDROM NURSERIES, Berwickshire.

Some rare double primroses and very fine plants of *Anemone Pulsatilla.*

Miss CLARK, Kippen.

One or two very choice species of Bruckenthalia, very dwarf and in full flower. The rock-work in this stand was very well placed and the background of shrubs very effective.

Messrs BANNATYNE & JACKSON, Hamilton.

Large planting of rock bulbs ; outstanding among them were *Tulipa Eichleri, T. Fosteriana,* and *T. Clusiana.*

WILLIAM CARVEL, Newton Mearns.

Lewisia Howelli, L. Purdyi, L. Finchæ, and Engleria Saxifraga in large variety.

SPRING SHOW 1938, EDINBURGH

THE SHOW was again held in the Waverley Market and attracted a larger number of visitors than any previous show held by the Club. The opening ceremony was performed on 27th April by Miss Callander of Prestonhall, herself a keen gardener, who remarked on the high standard of skill displayed in the cultivation of the many exhibits.

The George Forrest Memorial Medal was awarded to a Primula exhibited by Mr R. B. COOKE of Corbridge, Northumberland, whose Primulas, including *P. glabra* and *P. hyacinthina*, merit special mention. The latter has since received the A.M. of the R.H.S.

The K. C. Corsar Challenge Trophy and the Club Silver Medal, for a collection of six types of Rock Plants in pans, was won by Mr H. ARCHIBALD of Ogscastle, Carnwath.

Prominent in the centre of the Hall was a scene in miniature of a hill crest wooded and fringed with shrubs near a rocky bank leading on to a slope of grass, into which the rocks extended. Among the rocks were various Alpines and a showy drift of Cheiranthus.

If, as one hopes, these stands are to offer examples of rock planning and blending of rock-work into an adjacent part of the garden, then Messrs YOUNG & THOMSON are to be commended.

Similarly another stand was admirable. This showed a drift of heather among scattered pines falling to a loch side, and conveyed in a most natural manner the effective grouping of these glorious plants of the Scottish hills. METHVEN'S, who put up this stand, also showed nearby those neat little frames for alpines which are so useful. A newish feature of glass pots whose use is said to have several advantages was shown by the same firm, Messrs METHVEN & SONS.

An old friend of the Society, Mr PETER AITKEN, has gone from us, but his stand gave his interesting selection of plants for the rock garden ; dwarf Maples and Roses, *R. pumila* and *R. Roulettii*, and of course *Gentiana acaulis*, both normal and var. *alba*.

WM. CARVEL demonstrated a dainty expanse of scree mixture studded with plants, including *Armeria cæspitosa*, Lewisias, and a few bog Primulas.

The CASTLEHILL NURSERIES showed *Oxalis enneaphylla*, *Pentstemon Roezli*, and *Anemone Allionii* as most attractive plants.

The ALPINE NURSERY, West Moors, Dorset, had an effective set out of rock, with drifts of *Fritillaria meleagris*, *Ranunculus creticus*, and Ramondias.

MAXWELL & BEALE were not so strong on Ericas as might have been expected, but showed in addition dwarf Azaleas, Japanese Maples and Kalmias as subjects suitable for the heather and rock garden.

A. T. CLARK showed an unusual collection of hardy ferns as subjects for a moist cool wall, and also *Phlox adsurgens*.

The EDROM NURSERIES, who usually concentrate on Himalayan Primulas, introduced some striking Polyanthus and the double *Narcissus* " Queen Anne."

BARR'S showed Tulips in profusion, and of such a fine range of types and colours it is hard to select any as most worthy of attention.

DOBBIE'S showed Tulips as well, making a special feature of New Ideal varieties.

LAIRD & DICKSON had their usual fine stand featuring dwarf standard *Prunus Eickleri* and Polyanthus, in particular *P.* " Monarch's Mantle," a laced double form.

FORBES of Hawick showed shrubs, principally dwarf Azaleas and Cytisus, as rock bank subjects.

DICKSON'S of Edinburgh showed a gay stand of taller flowering subjects, including Azaleas, Cherries, Laburnums and Rhododendrons.

SMITH of Newry put up a stand of well grown shrubs which from their range was a botanical collection. Most would grow more happily in Ireland than Scotland, except in favoured spots. Attention was invited to *Olea lanceolata*, *Olea Cunninghamii*, and *Rubus parvus*.

Mrs LAING of Hawick showed a splendid example of a planted outcrop of rock. (Unfortunately notes of plants are missing, but this hardly matters where the plants used had been so well chosen for their site character.)

STEPHEN SIMS of Draycott showed examples of tufa—a deposited stone on framework—that lent themselves ideally for miniature rock gardens.

R. KAYE showed dwarf alpine Conifers and other shrubs with drifts of the usual rock garden subjects with *Androsace hirtella* conspicuous among a fine lot.

Office-Bearers for Year 1938-39

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Professor Sir Wm. Wright Smith, Royal Botanic Garden, Edinburgh.

President

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Mr Henry Archibald, Ogscastle, by Carnwath.
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Mr Ian Laurie, Blackness Nursery, Ninewells, Dundee.
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Mr J. L. Mowat, University Botanic Garden, St Andrews.
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Hon. Secretary and Treasurer

Mr Arch. Campbell, Junr., W.S., 18 Duke Street, Edinburgh, 1
(Phone 26236).

Hon. Show Secretaries

Mr W. F. D. Fleming, 113 George Street, Edinburgh.
Mr G. Laurie, Laurel Villa, Bishopbriggs.

Hon. Editor

Mr K. C. Corsar, Rubislaw, Braid Avenue, Edinburgh, 10.

Hon. Auditor

Mr A. Arnott, Union Bank of Scotland.

Constitution and Rules

1. The Club shall be called " THE SCOTTISH ROCK GARDEN CLUB," and is formed for the purpose of creating an interest in Rock Garden Plants; to encourage their cultivation, and to hold meetings and exhibitions for this purpose.

2. The Management of the Club shall be in the hands of a Committee consisting of at least 12 members, with the addition of a President, 6 Vice-Presidents, Secretary and Treasurer, who will retire annually but will be eligible for re-election. Four members shall form a quorum.

3. In the election of Office-Bearers, at least 3 Vice-Presidents and 6 members of Committee must be residents outside the County of Midlothian.

4. The Committee shall have powers to elect Hon. President, Hon. Vice-Presidents, and Hon. Members, and to fill any vacancy on the Committee which may occur during the year.

5. The Annual General Meeting of the Club will be held in the beginning of September of each year, when a duly audited Balance Sheet will be submitted, and when the election of Office-Bearers will take place. Ten members form a quorum.

6. The Annual Subscription shall be Five Shillings or any other sum or a Life Membership of Five Pounds or any other sum, as a General Meeting shall from time to time determine. This subscription entitles the members to all privileges. All subscriptions shall be payable to the Treasurer on the first day of September in each year. The subscription of any new member enrolled after the first day of July shall be deemed to cover the succeeding year.

7. A Special General Meeting may be convened by the Secretary at any time upon the requisition in writing of any ten members of the Club, who shall give at least 21 days' notice. The special business for which the meeting is convened shall be stated in the requisition, and also in the notice calling the meeting, and no other business shall be transacted at such Special General Meeting.

8. Not less than 7 days' notice of each General Meeting shall be given or sent by post to all members of the Club.

9. An Auditor shall be appointed at the Annual General Meeting. who shall audit the Annual Statement of Accounts and Balance Sheet, and certify the same before the Annual General Meeting.

10. The investments of the Club shall be vested in three Trustees to be appointed at a General Meeting of the Club. The Trustees shall deal with the same in such manner as any General Meeting or the Committee shall from time to time direct. The Committee shall have power to fill up any vacancy which may occur by resignation or death during the year.

11. The Committee may make Bye-laws and Regulations consistent with these Rules, as may be considered necessary for the proper management of the Club's affairs and for the conduct of their now proceedings.

12. No Rule shall be altered or repealed, and no new Rule shall be made, except by a majority of at least two-thirds of the members present and voting thereon at a General Meeting, and notice, in writing, of any resolution to alter, repeal, or add to the existing Rules shall be given to the Secretary, not less than twenty-one days before the meeting at which it is to be dealt with.

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THE SCOTTISH ROCK GARDEN CLUB.

FORM OF PROPOSAL FOR MEMBERSHIP.

This form may be sent with a remittance of **5s.** minimum as a subscription for one year, or **£5** for Life Membership.

To ARCH. CAMPBELL, Junr., W.S. (Secretary and Treasurer),
18 Duke Street, Edinburgh, 1.

I, *Mr / Mrs / Miss* .....
(Please write in Block Letters.)

Address .....

.....

.....

enclose the sum of.....being my Membership Subscription for the year.....

Date..... *Signature*.....

(*Cheques may be crossed "Union Bank of Scotland."*)

BANKER'S ORDER FORM.

To.....

.....

Please pay to Mr ARCH. CAMPBELL, Junr., W.S., 18 Duke Street, Edinburgh, 1, on receipt of this Form,* the sum of Five Shillings, my Subscription to The Scottish Rock Garden Club for the year 19....., and a like sum on the 1st of January in each succeeding year until otherwise ordered * or the sum of £5, being the Subscription for Life Membership.

	2D.	
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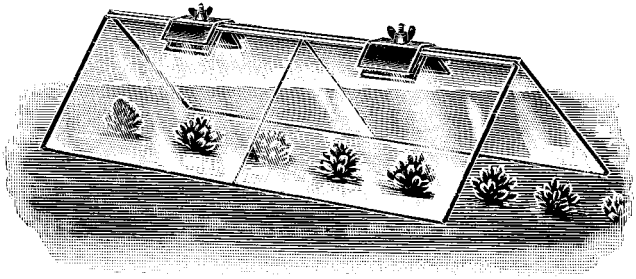
If you decide to use this Form, kindly send it completed to the Club Treasurer.

* *Delete item not required.*

WEST'S CLOCHE CLAMPS



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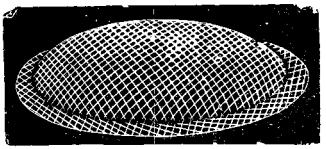

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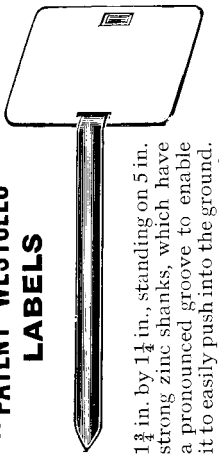

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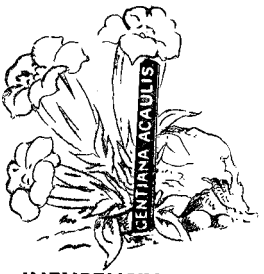

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