

# *The* NATIONAL HORTICULTURAL MAGAZINE



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# The American Horticultural Society

*Devoted to the popularizing of all phases of Horticulture: Ornamental Gardening, including Landscape Gardening and Amateur Flower Gardening; Professional Flower Gardening and Floriculture; Vegetable Gardening; Fruit Growing and all activities allied with Horticulture.*

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*Kniphofia mirabilis albida*

[See page 36]



# The National Horticultural Magazine

B. Y. MORRISON, *Editor*

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*Contributing Editors*

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Midwinter for the North, and yet in the South already spring is in the air. The foolish camellias that have tried to flower through the last months are now fairly safe if they unfold their stodgy waxen heads. The tazetta narcissus hang out their heavy scented clusters as they will; violets rise through the leaves and the white zephyranthes push up their spears. Jasmines show a swelling in their buds and the most fragrant bush honeysuckles perfume the winds. Fruitlike and sweet the breath of the fragrant olive fills the shrub walk and here in our own country, if we search carefully, we also may find a violet or two, a hardy snowdrop, a spray of witch hazel. This is one of the chief delights of gardening and of life, to have what we should not reasonably hope to have, and if one is both wise and philosophic how often this sweet unreasonableness is safely accomplished.

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# A Poet-Farmer Two Thousand Years Ago

BY MILDRED DEAN

It is hard to imagine a connection between garden books and political propaganda; but a situation arose nearly two thousand years ago whose difficulties were largely solved by the gentle agency of a poet-farmer and his books on the soil, trees, herds and bees. War-torn Italy was full of idle soldiers, restless in the peace that came after the civil wars, when Vergil wrote his poems on rustic life, calling men back to the sober joys of husbandry. The tranquility of life on the farm, its wholesome regularity, the beauties and satisfactions of the labor and the harvests, form his theme, although he constantly deals with practical details and gives directions in some respects quite minute. Modern gardeners may be amused to hear him discuss burning over the ground, or read his description of amellus, or to learn his views on other questions still debatable among our guild.

"In early spring, when chilly moisture trickles from the hoar hills and the crumbling clod thaws in the west wind, even then would I have the bull begin to groan over the deep-driven plow and the share glitter with polish of the furrow."<sup>1</sup> Consider the situation of each plot and plant things suitable to grow there. "In turn likewise shalt thou let the stubbles lie fallow, and the idle field crust over unstirred; or else there under changed skies sow golden spelt where before thou hadst reaped the pea with wealth of rattling pods, or the tiny vetch crop, or the brittle stalks and rustling underwood of the bitter lupin. For the field is drained by flax harvest and wheat harvest, drained by the slumber-steeped poppy of Lethe, but yet rotation lightens the labor; only scorn not to soak the dry soil with

fattening dung, nor to scatter grimy ashes over the exhausted lands."

"Often likewise it is well to burn barren fields and consume the light stubble in crackling flames: whether that earth thence conceives secret strength and sustenance, or all her evil is melted away and her useless moisture sweats out in the fire, or that the heat opens more of these ducts and blind pores that carry her juices to the fresh herbage, or rather hardens and binds her gaping veins against fine rains or the fierce sun's mastery or the frostbite of the searching north." Now what arguments are left against burning, when so many points can be urged in behalf of it?

Work your ground ceaselessly, he counsels, and harrow after plowing. It is only in perpetually stirring the soil that the farmer can hope to tame his fields. Wet summers and clear winters are to be prayed for. In such seasons the earth pours forth her increase. But the way of tillage is bound to be hard. Jupiter himself planned it so, sharpening the wits of man with care—"that so practice and pondering might forge out many an art, might seek the corn blade in the furrow and strike hidden fire from the veins of flint." But other troubles come to weary the farmer beside his rough toil, for mildew devours the stalk and tall thistles lift their lazy spears above the crop. "A forest of clivers and burs advances, and fruitless darnel and wild oats reign over the shining tilth."

His list of tools for the farmer has a familiar ring for those of us who can survey the bounds of our garden from the middle; but what will the magnificent west say of this outfit? A plow-share and its heavy curved plow, a wagon, sledges and harrows, and the weary weight of the mattock, hurdles

<sup>1</sup>Quotations are from the English prose version of J. W. Mackail.



of arbutus wicker, and a winnowing fan! Then follow directions for making the plow, bending and seasoning the elm to make the share-beam, a piece of limewood for the yoke, beech for the plow-tail, and oak battens well smoked. The threshing floor must be considered a part of the farmer's equipment, and it must be well rolled to keep away plunderers, the mouse and mole, or toads, the weevil and the ant.

In the autumn walnut trees will foretell the winter for you by their foliage and by their nuts; select your finest seeds then to keep for sowing next year and soak them in olive lees to make them even larger. Study the stars to know when to sow: "When the Scales make daylight and sleep equal in hours and just halve the globe between light and shadow, set your bulls at work." The stars will determine for you the times proper to sow any one of the crops, for each seed must go into the ground at the time most favorable for it. There are many odd tasks to be done when the weather is bad, beating out the point of the blunted plow-share, hollowing out a drinking trough from the tree trunk, marking the stamp on the flock, sharpening stakes and forked poles, weaving baskets, or grinding the parched corn.

The moon decides what days are lucky and what ones not so. Shun the fifth, it was the birthday of the Furies. The seventeenth is lucky for setting the vine and for catching and breaking oxen. Many tasks are better done by night than in the daylight. Mow light stubbles and parched meadows by night; and sharpen your torchwood by firelight, while the housewife runs her noisy shuttle through the web, or boils the sweet must over the fire.

Winter is the farmer's holiday, when he feasts with his friends on the stores from his summer's work. Then he strips acorns from the oak and berries from laurel, myrtle and olive; then he sets snares for the crane and

nets for the stag and hunts the long-eared hare.

Propitiate the gods by constant offerings and learn to watch the weather, not otherwise can a farmer be successful. We commend these pages on weather signs to the official forecaster, for the poet says, "If indeed thou wilt regard the hastening sun and the moon's ordered sequences, never will any hour of the morrow deceive thee, nor wilt thou be taken by the wiles of a cloudless night." He gives signs from cloud and wind, sunset and sunrise, moonrise and moonset, rainbow colors and starlight.

For raising trees and vines, the poet has many precepts. Poplar and willow, osier and broom grow without cultivation, and others seed themselves like chestnuts and oaks. Some travel by suckers like the elm and cherry. Some must be layered, some raised by slips, and some by roots. Some may be grafted, a pear upon an apple, and plums on the stony cornel. Labor must be lavished on all trees and vines. Set slips for hazel and ash and Chaonian oaks; grow tall pines and fir for ships' timbers. Graft walnuts on arbutus, apples on plane trees and pears on mountain ash, chestnut on beech and swinecrush acorns on the elm. You may put buds in the wet sapwood just where the knobs push out from the bark, or you may cleave open the trunk and split it with wedges and let in a graft of the fruit tree.

There are many kinds of grapes growing on different sorts of vines, each making its own special wine. The vine loves open slopes as yew trees love the freezing north. Different climes produce different trees. India has the ebony. Ethiopian trees are silvered with a soft fleece. The Chinese comb a delicate down from the leaves of another. (He here refers to the fibres which the Chinese wove into silk, which was first imported to Rome during the Augustan Age.) Media yields sour juices and the citron useful as an antidote; its



leaf is like the laurel, but perfumed and the honeyed blossoms cling close.

But Italy is the garden spot. Vine and olive grace it; two crops do apples yield and twice a year the cattle bear. No fierce animals are here or serpents to endanger life. Her cities crown the heights and her plains flow with richness. Olives are on the barren slopes, the vine in sheltered valleys where the land is fat and moist. Cattle are reared in the lawns and plains of foothills.

It is important to know how to tell soil. Sink a pit deep and then refill it. If earth is lacking, then the soil is loose and fit for vines and flocks. But if it will not all go back whence it came, it is heavy. Test for acidity by wetting some in baskets and tasting the drops that run out. Let the sun strike on the well-plowed trenches. When you are transplanting, work the soil well and set the plants as they stood before, with the same side south, the same side north. Set vines quite close on flat land, but on the hillside give them more room, like an army deployed. The vine may have a shallow furrow, but the tree must be sunk deep. Do not plant vineyards on a western slope. Do not stir the earth when it is cold. Set vines when the birds come in spring or when the early frosts begin.

Scatter manure and dig in porous stone and rough shells to loosen the earth. When the seedlings are set, bank up the earth with the hoe, work the soil with the plow and guide the oxen between the rows. Set light reeds that the vines may climb up to their elms and do not prune till they are well up on the trees. Make hurdles of reed to keep off the animals that would crop the tender shoots. Every year must the soil be loosened with the mattock and the vine trimmed for winter. Wheel away and burn the prunings. The olive needs no working. Orchard trees need no aid.

The farmer is the really happy man. Power, ambition, wealth are bitter; but his life is peaceful.

The third Georgic is on the subject of the cattle on the farm; and while it is extremely interesting to cattle breeders and dairy specialists, it has not so many charms for mere gardeners. Suffice it to say that in it the poet gives a picture of the plague which devastated the farms of Italy during the first century B. C. and that from the symptoms, the disease has been diagnosed as anthrax, the dreaded foot and mouth disease which has stricken our own land within recent years.

It is in the Georgic on bees that we can see most plainly the shrewd observation of the ancients. The bees' home must be near clear springs, the poet tells us, with overhanging trees. Shelter them well from winter's cold and from the fierce heat of summer. When they swarm in spring, sprinkle odors, crushed balm and tufts of honeywort, and make a tinkling sound and a clashing of cymbals. Often the kings will fight and then armies will muster and the combat will rage in midair. Scatter them with a handful of dust; and kill the lesser leader. But when they are about to swarm, if you pull off the wings of the king, they will not set out on their way nor move standard from camp.

The owner of the poorest land may yet have fine honey. Jove himself dowered the bees at birth, because they fed him when he was hidden in the cave on Crete.

What a shock it would have been to that masculine generation to know that the bees' king was a queen! "Furthermore not Egypt and mighty Lydia, not the Parthian peoples or the Mede by Hydaspes so adore their king. Their king safe, all are of one mind; he lost, they break allegiance, plunder the cells they themselves have built and break open the plaited combs. He is guardian of their labors, him they regard and all gather around in murmuring throng and encompass him in their swarms and often lift him on their shoulders and shield him in war with their bodies and seek through wounds a glorious death."



The bee-keeper's task was no easier then than now, and apparently he resorted to the same devices. "If ever thou wilt unseal their imperial dwellings and the stored honey in their treasuries, first sprinkle thyself and wash thy mouth with a draught of water and hold forth searching smoke in thy hand." Nor was the taking of the honey the only difficulty then any more than now! "Fumigate with thyme and cut away the empty cells, for often unnoticed the eft nibbles at the combs and beetles build their nests and hide out of the light, and the drone, sitting idle at another's board, or the fierce hornet joins battle, or moths, an ill-omened tribe, or the spider spreads her loose web in the doorway." And later he describes the worst of all. "To bees also life brings such mischances as ours, they droop under sore bodily ailment;—and this thou wilt know by no uncertain signs: straightway their color changes in sickness, they lose their looks and grow thin and haggard, and carry out of doors the bodies of their dead and lead the gloomy funeral train and either hang clutching by their feet at the doorway, or shut their house and idle within, hungry and spiritless and benumbed by a cramping chill."

He hastens to tell us the cure for this sad plague, and it is here that he gives us the description of the amellus. "Hereat I will counsel thee to burn scented gum and drip honey in through pipes of reed, calling the tired creatures to their familiar food. It will be well to mingle withal juice of pounded galls and dry rose leaves or wine boiled thick over a fire, or raisin clusters from the Psithian vine and Attic thyme and strong smelling centaury. Likewise there is a meadow flower named amellus by husbandmen, a plant easily found by the seeker, for it lifts from a single stalk a dense growth of shoots; golden the flower, but the petals that cluster thickly around it are dark violet shot with crimson; often the gods'

altars are decked with its woven wreaths; it tastes bitter in the mouth; shepherds gather it in the cropped valley grass and beside the winding stream of Mella. Boil the roots of this in fragrant wine and set it in basketfuls for food by the doorway."

We are compelled, however, to fear that he did not have much faith in the cures he describes, since his next passage gives explicit directions how to get other bees into your hives if the plague has bereft you entirely. But his method departs entirely both from experience and common sense, a charge we can not often bring against him.

The success of the poems was immediate. Their dignity and beauty impressed the intellectuals, and their noble tranquility soothed and inspired the common people. Before long, crowds were chanting parts of them in the streets. The spirit of unrest which had possessed the populace seemed exorcised, and there settled on the world that deep peace which ushered in our era. This happy consummation can not be entirely attributed to Vergil's poems, of course. The reforms of Augustus brought in a government both just and strong. The world was sick of strife and longed to ply the arts of peace. But the fact remains that the noble rhythm of the poet's verses awoke echoes in the hearts of his countrymen and made them conscious of the beauty of their language and of the glory of their national destiny.

What wonder then that they have always kept his name in love and reverence and that they have invited all the nations of the earth to join with them in 1930 to celebrate the two thousandth anniversary of his birth? The American Classical League, a national organization of lovers of the classics, is directing over thirty committees which are stimulating tributes to the poet, and offers here in this garden journal of our own day this memorial of a gardener whose craft was poetry and whose poetry was power.



# The Sempervivums—Les Joubarbes

By HENRI CORREVON

*Translated and published by permission*

## TRANSLATOR'S FOREWORD

To Mrs. Louise Beebe Wilder must be given the credit for setting in motion the work of translating this small volume, for in a recent number of *House and Garden* she expressed the wish that it might be done. The editor, with a greedy eye for our own pages, set about the task and asked of M. Correvon two things, first, the needed and graciously given permission to translate and publish, and, second, the privilege of purchasing an entire collection of plants from his collection. From the Plant Quarantine and Control Administration came the necessary permit to import and in due time arrived the precious package containing specimens with almost two hundred names, some of them admittedly of doubtful value but preserving a special strain of some significance, as for example in the case of *Sempervivum arenarium* Koch and *S. cornutum* Hort. which M. Correvon considers synonymous but which are distinct from the gardener's point of view and usage.

In the translation M. Correvon's text and arrangement have been followed with only occasional liberties in the reading of the earlier chapters; liberties that have been censored by Mr. M. J. Souviron, to whom our thanks are due.

It is hoped that after the work has been completely published, some notes, both critical and cultural, may follow from our American experience.

The illustrations in the first installments are from American material carefully verified by the Correvon plants, which are still too young and too newly arrived to sit for their pictures. These, however, are to serve for later use as rapidly as is possible

so that in time our readers may even be surfeited by hens and chickens!

—B. Y. M.

## INTRODUCTION

The sempervivums (more correctly semperviva) form a very interesting genus of plants to which one becomes attached as soon as he is acquainted with them. It is enough to have only a little of the spirit of the collector to be fired with a desire of gathering together all the species and the numerous types and varieties which have developed during the three quarters of a century of their cultivation in gardens.

About the types *tectorum*, *montanum*, *arachnoideum* and *hirtum*, that are the most strongly characterized, centers a whole collection of species and related forms that acclimatization preserves and accentuates. As these plants are of very easy cultivation, lasting a long time and deserving well their name of "ever-living," they are simply kept, which encourages beginners. One of my friends who studied medicine has possessed from his youth several sempervivums (*arachnoideum*, *tectorum* and others) that he cared for in pots. He left for Paris in 1860, where he had to finish his studies, and carried his plants with him. There he kept them in his window in the great uproar of the city, where they spoke to him of the countryside and the mountains. Very recently this doctor, who has a long and fine career behind him, showed me the pots of sempervivum and said, "These are the very ones I carried with me to Paris; they are still here and will remain faithful to the end."

It is for their hardiness as well as their frugality that these plants are



particularly valuable. The fact that they take up so little space, live as much on air as water, endears them to us, and also the fact that they nearly all furnish small objects of ornament that live and develop before our eyes. Without doubt they need particularly both fresh air and sunlight. Without sunlight they become spindling, their leaves elongating and losing their color. The plants themselves do not die but lose their character. I remember that in 1880 I exhibited at the Electoral Palace in Geneva a collection of sempervivums which was installed in a very dark corner of the building where the plants lacked both air and light. About the second or third day following I was much surprised to see their leaves becoming pale and drawn with the tips hanging down and the centers of the rosettes showing a blanched color. They rapidly lost their distinctive characteristics so that in about eight days they were unrecognizable. I returned them to a normal situation and saw them rapidly restored to their respective characteristics without apparent harm from their experience.

There have existed for some seventy years numerous collectors of sempervivums. The establishment of Van Houtte at Ghent has collected them since 1840 and distributed them to amateurs. English, French, Dutch and German horticulturists followed the movement and spread the love of these plants among the collectors. Botanic gardens established collections and our own garden at Geneva had its collection at the time of Reuter; it was complete and well studied. The botanists, Jordan at Lyon, Lamotte at Clermont-Ferrand, Verlot at Grenoble, Boissier at Valleyres-sur-Orbe, cultivated them for their studies. The fine horticultural-botanical establishment of the famous firm, Regel and Kesselring, at Petrograd, possessed a nearly complete collection which served a great number of amateurs. Their catalogs contained more than one hundred species and varieties. One knows

what the Bolsheviks have done to this superb establishment which belonged to a Swiss citizen whom they have divested, robbed and driven out. They have merely annexed the whole thing to their university and at the present time this treasury of plants is destroyed! Thus lives communism and the pillage of the property of others!

We must not forget the house of Vilmorin, that, in its huge establishment at Verrières near Paris, has had a collection of sempervivums for fifty years, of which they have given the first horticultural study in their fine work, "*Les Fleurs de Plein Terre*."

The botanic gardens of Germany and Austria-Hungary possess once excellent collections and I have seen at Darmstadt, Geneva, Brunswick, Leipzig and Innsbrück fine collections of *joubarbes*. I know that at Berlin and Vienna, where I have never been, they have important collections as well as at Graz and Laybach. At Prague, from 1880 to 1890, the head gardener of the city, M. Fr. Thomayer, cultivated a collection comprising two hundred sixty-eight different types, many of which, of course, were synonyms. The Paris Museum of Natural History, where I had the honor of having been a pupil in 1875, has cultivated the plants for a century with the result that in the great city "of the mad king," Henri IV, there were numerous amateurs who cultivated often on simple balconies or terraces beautiful collections of these plants. In 1890 I admired, at No. 41 Rue de la Tour d'Auvergne, in a very small garden and on a rockery of old mill stones carried from the neighborhood, a collection both rich and prosperous, cared for *con amore* by one of my compatriots, a nephew of the celebrated General de la Harpe, to whom a friend had loaned this corner. Here I found a curious form collected in Valais that I brought here and cultivate under the name of *Sempervivum La Harpei*. Through all the Paris suburbs there have been cultivated for fifty years similar collec-



tions and many horticulturists have made them their specialty (Chaté, Simon, etc.).

In the Linnean Botanic Garden in the Alps at Valais I have attempted to group a collection of sempervivums that I have established on very sunny rocks exposed to the southeast. They have done marvellously there, but have hybridized so much in several years that one could not find them again. In the Garden of the Rambertia, which we established in 1896 at an altitude of 2,000 m. on the rocks at Naye, I had installed a similar collection which prospered as well in as remarkable a fashion until one autumn day, when a thunderstorm had destroyed our fence, it was overrun by a flock of sheep and devoured by those abominable "razors of the globe."

But one has to go to England to find the best collections of *joubarbes*. Having possessed since 1875 a collection, of which the botanist Boissier had given me the first elements, I easily entered into relations with amateurs beyond the Channel and others, and so was able, especially by means of exchanges, to complete and make my collection authentic. I well say "authentic" because there existed everywhere such a host of fantastic names that it was necessary to examine all the labels and determine the types. The collections of the Royal Gardens at Kew and Edinburgh, the University Gardens at Cambridge and Oxford, and of serious amateurs like Fraser at Edinburgh had been well established but they declined and lost their importance from the lack of a monograph of the genus permitting the identification of the plants.

This lack of positive information discouraged numerous amateurs and botanists. During the fifty years that I have cultivated sempervivums I have had contacts with many botanists wishing to make a monograph. I have also given to many among them complete collections of all the types that I have in cultivation here. All has been in vain and not one of their prom-

ises have been realized. These gentlemen said and still repeat that one can not make a study of the genus from herbarium specimens but that it is necessary to study them in life. (There is in this a striking contradiction of certain other botanists of eye glasses and robes who claim that botanical gardens are useless to science and that plants cultivated there never have any value for the study of species.)

Now, while waiting for these gentlemen, our savants, to give us that monograph so impatiently awaited, the collectors have wrestled with their lack of knowledge to determine their labeling. It is for that reason that I have thought to give them, the numerous friends of plants in two hemispheres, the benefit of the observations I have made at my home. It is not to be imagined I have the temerity to march into the reserved territory of a monograph. Rather, on the injunctions of several friends, particularly that Belgian friend to whom these pages are dedicated and who inherits the tastes of his countryman, Van Houtte, I decided to publish this preliminary work, a sort of Prodrômus which will point out the territory and give the results of my studies and observations over fifty years.

There is indeed much to throw light upon and the labor of clarifying is sometimes painful to one who has a huge collection and has assembled a great quantity of different types. But he must have the courage to reduce the number of these types and to abandon certain names that have been used twice by authors, because there are many species where the varieties differ slightly from each other and bear sometimes as many as three or four different names. There are, on the other hand, names to be corrected, as for example that of *californicum*, which certainly arose from the inattention of an employee who had to write *calcareum* and so perpetrated an enormous heresy. (See the article I have published in the Gardener's Chronicle, "Erroneous Names," on the subject



of the absurd names that are in use in horticultural circles due sometimes to the simple negligence of a gardener in copying a label.) This fallacy that places a *sempervivum* in America, where this genus is not found, has gone about the world and lately I found *Sempervivum calcareum* in place in the Botanic Garden of Sion bearing in beautiful writing the name *californicum*. The director, a dignified priest, but one who knew nought of such matters, explained to me that he had bought that plant from one of our best Swiss-Romand horticulturists. Brought up myself by the famous Froebel at Zurich, where I was an apprentice from 1870-1873, I recall that in that establishment, always nearly impeccable, where nomenclature was rigorously controlled, they cultivated *Sempervivum calcareum* under this ridiculous name. It had come from Van Houtte where the original error occurred. Such errors are very common in horticulture and that is why he who writes these lines, whenever he is a member of an exhibition jury, always insists upon a special mention for an exhibit that is correctly labelled.

It is not possible to collect if one does not maintain scrupulous order and if one does fall into anarchy. A plant without a name is of little value to a collector, but if it carries an erroneous name it will be a burden until the day that it is identified. I know well that my late friend, Alphonse Karr, if he were living, would hold me up to ridicule and bait me with his stinging gibes. But he was a philosopher-gardener and I, I am a gardener-botanist, of such a sort that we can not understand each other except on the subject of gardening.

And that is why, botanist-gardeners, gardener-botanists and collectors, I come to give you this little work which seems very slight and yet has cost me long hours of study and observation. Judge it with indulgence, for I am far from believing my work infallible; but what I am able to tell you is that what

has been done has been done with all the care that the question merits.

I must give special credit here to my friend who has been willing to aid me in this difficult task. I refer to Dr. Dekeyser of Brussels, who has reviewed all the text and cared for the printing of this volume, for without him it had never seen the light of day. He has given me his valuable collaboration with a skill, a perseverance, an exactitude, a knowledge and understanding of the case that enables me to state here that this volume, more than all others issued from *Floraire*, has a scientific nature.

Chene-Bourg near Geneva,  
November 8, 1922.

## CHAPTER ONE

### THE SEMPERVIVUMS AND THEIR CULTURE

The "Joubarbe" (from the Latin *Jovis barba*, the beard of Jupiter) is a genus of the Crassulaceae. The Latins called it Aizoon after the Greek. The dictionaries tell us that these plants "live on the surface of the earth" and have leaves large and flattened forming a sort of open artichoke. The old dictionary of Delamere, published in 1767, "with the patronage of the King," gave to this mysterious plant four columns in folio. The type that he gives is the following: "Common large Jove's Beard or wild Artichoke, in Latin *Sedum majus vulgare*, called also *Umbilici*, *Veneris species altera* and *Cotyledon altera*. This plant is always low; its leaves are fleshy, flattened, reddish toward their extremities and terminating in a long point, hard and red. The rosette leaves are fleshy and their points are turned down toward the base; those which are borne on the stalk are less succulent and overlap at their tips; the stems do not carry them at all. It is common on old walls and on the roofs of cottages, etc." Then our author is able to give long recipes for the various remedies that the plant produces. The juice of the leaves heals fresh wounds and stops



hemorrhages; gathered leaves are applied to the eyes in case of inflammation and to burns. They are able to cool inflamed parts of the body. Our author adds that mixed with woman's milk or with the juice crushed from a crayfish the sap is able to allay both dreams and insomnia. I will spare you the rest. I must add, however, that the celebrated botanist, Tournefort, considered the sempervivum an excellent remedy for "foundered horses, if they are made to drink a pint of the juice of the plant itself" (*sic*). I should like to know how many rosettes one must destroy to obtain one pint of juice!

My dictionary does not speak of the legends that are current about the *joubarbe* of the roofs, but the Reverend Friend, in his two volumes, "Flowers and Flower Lore," tells us at length. (London, 1884.)

The Celtic, Germanic and Scandinavian races, as well as the Latins, considered the sempervivums as driving off demons and protecting houses: it is the plant of Jupiter, god of thunderbolts. They plant it on their thatch, on their roofs and on the pent houses of their stores to avert the lightning. The Jupiter of the northern folk being Thor, it is to him that these people consecrate the plant. The Germans and the Scandinavians consider it also a charm against the evil deeds of the devil and often dedicate it to him, believing its presence enough to drive off evil spirits. They call it "Thor's Helper," affirming that the plant once saved the god in crossing a river where the sorcerers thought to overwhelm him when he advanced against the Ice Giants. In all Europe, save perhaps in Slavic countries, the *joubarbe* has been, and in the countryside still is, considered as a protection from lightning. In Brittany, Normandy and in several other provinces of France, as well as here (in Switzerland), it is still planted on many roofs. In Belgium the *joubarbe* is believed to have been deposited by the thunder on the roofs of favored houses.

If I open the bundle of papers where I keep all that I have been able to save of the legends of my own country, I find that the *joubarbe* has been cultivated here from primitive times and that the Romans who have civilized Switzerland and Latinized us already planted the *joubarbe* on their roofs to protect their dwellings from lightning.<sup>1</sup> See what Cariot says in his study of the flowers, p. 211: "*Joubarbe* of the roofs. *Sempervivum tectorum* (*Artichaut des murs*).—This beautiful crassulaceous plant that is also called *Barbajou* (Beard of Jupiter), often carpets the walls with its green rosettes and even grows on the mossy tiles of old roofs. Very little soil will serve it: it finds its nourishment in its fleshy leaves; from its center bursts forth a flower stalk with numerous purplish flowers. The juice of the leaves is astringent; it is used for hemorrhoids, burns, bruises, intermittent fevers and foundered horses. Some call it *Herbe aux cors* because one may place it on the corns after having removed the skin. It can take the place of purslane in salad. The juice is cosmetic."

In the Bulletin de la Société d'Horticulture de Grenoble, Nicollet states that a physician had declared in the Academy of Medicine that in 200 cases of inflammatory angina he had used the juice of the *joubarbe* in a dose of sixty grams in a liter of beer and that "always" it had given full relief. This solution incites vomiting at the same time with violent colic. Two liters of beer treated with *joubarbe* is enough to make inflammatory angina vanish!

The *joubarbe* of the roofs is the *Sempervivum tectorum* of Linné, that Boreau has made *Sempervivum murale* which he distinguishes from the type by the fact that the stamens are monstrously transformed into carpels (fruits or pods bearing the seeds) borne on short stalks and distinct from the petals,

<sup>1</sup>Little remains to us of all that was the early Rhetian-Roman and Iadine and Swiss-Roman, the invasion of the Teutonic barbarians having annihilated the Latin civilization in all that is now German-Swiss.



while in the type these are attached to the corolla. Sometimes the rosettes of leaves are more strongly developed than in the type. I cultivated here a specimen of great beauty that I collected on a limestone wall at Cornaux (Neuchâtel).

The *joubarbe* has in its appearance something unique and mysterious that attracts and holds the attention. When one sees it on a roof or on top of a wall, one experiences a feeling of admiration for this frugal herb that subsists on nothing, drinks in the light of the sun, lives in the hot and dry air and develops its rosettes in such an arid place. Its flowers hardly attract attention; they are simple and not brilliant, but like the Gui of the old Celts, they have a history that reaches far into the mists of time long passed by. Is this not sufficient to render them dear to those who love nature and by their increase the things of olden times as well?

For establishing the sempervivums and for their cultivation, the kind of soil matters very little; a light soil, no excess of moisture, full sun. All the *tectorum* group and the species with large leaves are cultivated with great ease. They may be planted in borders, among rocks, in the joints and on the top of walls, on roofs, it does not matter where. But if an excess of moisture is injurious to them, it should not be forgotten that all succulent plants have their roots deep down in the soil in order to suck up the water needed to swell up their tissues. Their cultivation in pure sand is practiced at Floraire in certain cases to preserve the type and the botanical characteristics that an excess of nourishment would modify in proportions and dimensions. We have also our type collection conserved in sand, as that gives us an opportunity to continue our observations, for when we grow them in the open air, the sempervivums develop their leaves in too exuberant a fashion. The best system, adopted by Boissier at Valleyres and by Jordan at Lyon, one that we follow too and

that is followed on a large scale in England, is their cultivation in well-drained pots. M. Pauli has formed a valuable collection of this sort that he cultivates at the very gate of the city of Brussels. If one takes care to place the pots in full sunlight, to drain them well and to surround the rosettes with small pebbles that maintain the coolness of the earth, one arrives at excellent results.

The species of the Group *Diopogon* (having flowers with six divisions and yellow corollas) are equally easy to cultivate. They require a deeper and more calcareous soil. Dr. Guidot has shown me at his home a flat roof of a veranda that had been covered with gravel and sand to temper the heat. After several years the roof was completely covered by *Sempervivum arenarium*, most of which had fallen from an upper window. The ground so hidden, and hidden to such a point that it was not possible to see the sand through the bed of rosettes, measured 8 by 4 meters; it should be noted here that nothing had been foreseen; it was pure accident that transformed this roof into a pasture of verdure.

The only sempervivums that present not difficulties but certain requirements in their culture are the species with woolly down and those of the high mountains, those belonging to the groups, *montanum*, *barbulatum* and *arachnoideum*. For these species it is necessary to have, if possible, a wall or rockery, and if they are cultivated in pots, a light calcareous soil and full sunlight.

The propagation of sempervivums by division of the clumps is so easy that seeds are not to be recommended except for distant countries to which the journey would be too long. I can testify, moreover, that a collection containing 140 species and varieties that I dispatched November 15, 1920, to Dr. Yersin, Director of the Pasteur Institute at Nha-Trang (Annam) and that arrived January 8, 1921, travelled well. Several species (a score) suffered from the long journey and 15



died from crossing the equator. Dr. Yerson, conqueror of the plague, directs the Annam Branch of the Pasteur Institute and has established at Bon-Ha, a granitic range 1,500-1,600 meters in altitude, a trial garden where he is successful in establishing and acclimatizing a great number of alpine plants that we have sent from here. This Swiss-Roman, having become French, loves to gather about him and cherish with affection these jewels of the Alps, which once he had admired on his trips into the Alps at the time he was a college student at Morges. His collection of sempervivums, among other things, gives him great pleasure.

In the use of seeds I insist on the fact that it is important to use only seeds collected from stalks protected from the visits of insects, if one wishes the pure species. Moreover, to have the seeding is abundant and the seeds germinate quickly and with ease like those of all the Crassulaceae. We send seed of sempervivum to Japan, New Zealand and elsewhere and know that they germinate. It is important

in cultivating the plants that one collects seeds from plants at considerable distance from one another and protected with muslin as well.

The sempervivums are generally lime-loving plants, especially the group *tectorum*. Yet there are some that seem to be averse to lime and absolutely silicicole. The types *montanum* and *arachnoideum* have passed as such but one finds them also, though it is exceptional, on lime and on soil with the lime not neutralized. Without doubt in the Maritime Alps *montanum* passes into the form *burnati* on limestone but one also finds there the true type. In our nurseries either at Floraire or at the rock garden at Naye where everything is limestone, as well as at Linnaea where the soil is pure granite, the plants behave in similar fashions. It is true that in 30 or 40 years one might not be able to see very important changes and that it might take whole centuries to modify a species. In all cases I have never observed a failure in cultivation due to the chemical nature of the soil.



Russell Reid

The Roosevelt Cabin





*Russell Reid*

*Original Site of the Roosevelt Cabin, Chimney Butte Ranch, near Medora, N. D.*

## Roosevelt Cabin

AND WHAT HAS BEEN DONE TO BEAUTIFY IT

BY FANNIE M. HEATH

As most of you know, this cabin was the abiding place of our well loved "Teddy" (Theodore Roosevelt) during much of the time that he spent in North Dakota. It was first taken from its original setting, "The Chimney Butte Ranch," and sent with the other North Dakota exhibits to the St. Louis Exposition. It was again exhibited at the Lewis and Clark Exposition at Portland, Oregon, and later at several other places.

It was then rebuilt in front of the Capitol Building at Bismarck. This proved so inharmonious setting that it was again moved to its present site at one side of the grounds and back of the State Memorial Building (the home of the State Historical Society), and was a forlorn and neglected look-

ing object when the care of it was taken over by Minnehoshe Chapter, Daughters of the American Revolution. These ladies have made a faithful attempt to refurnish the cabin just as when occupied by its illustrious owner. To Mrs. Fred Conklin and Miss Aldyth Ward belong the honor of originating the idea to use only plants native to the State of North Dakota to beautify the grounds immediately surrounding the cabin. It fell to my happy lot to direct these plantings.

This idea of using only native plants found so little favor with those in charge of the grounds that a space about a rod wide all around the cabin was all the original plan called for. No, they did not want wild flowers. They wanted tulips, peonies, iris and gladi-





Pearl Frazer

*North Dakota Cactus*  
*Mamillarias in Flower; Opuntias to Follow*

olus and other kindred showy things, so the first great step forward was to overcome this prejudice. To their credit be it said that once we had demonstrated even in a very small way that the grounds could be made attractive by the use of native plants they became as enthusiastic for these plants as one could wish and have given whole-hearted cooperation to carrying out this idea. Then the legislature appropriated funds to give the cabin a new fence and the grounds were enlarged to ninety by one hundred and forty feet, so that now it is enclosed by a neat fence with a beautiful memorial gate at the entrance. This fence is now adorned with good specimens of all of our woody vines, two varieties of clematis with their furry seed heads, *virginiana* with many white blossoms and *ligusticifolia* with creamy ones. The bittersweet with its clusters of creamy blossoms followed by the bright orange encased scarlet berries, *Lonicera dioica* var. *glaucescens* with blossoms and berries from lemon

yellow to bright orange, the wild grape (*Vitus vulpina*) with attractive fruit, the Virginia creeper (*Ampelopsis quinquefolia*), *Smilax herbacea* and moonseed vine, all with their bluish black fruit. This moonseed vine (*Menispermum canadense*) deserves to be better known that it is, has handsome, large glossy dark green leaves, much like English Ivy in shape and texture, is entirely hardy anywhere and holds its foliage late in the fall. These vines make a desirable background for the forty-five of our fifty-two varieties of native shrubs that are planted largely as grouped border plantings about the grounds. This does not include the eleven varieties of willows that we have. Nine of our twenty-two varieties of trees are also to be found there and over one hundred and fifty kinds of flowers. And while we have had many delays and numerous discouragements to contend with, I think we have just cause to feel very proud of the results obtained, for to-day I





Pearl Frazer

[See also page 49]

*Oenothera caespitosa*, *Galium boreale* and *Artemisia frigida* in the Rock Garden

doubt if there is a place within our State that is visited by as great a number of visitors from all walks of life as "Roosevelt Cabin." The register for the past four months shows almost eight thousand names and less than one-third of those who visit the cabin register.

To the south and west of the cabin we have planted such plants as grew about it in its original setting. Our five varieties of cacti, fritillarias, the dwarf astragalus, violets, pentstemons, and many more of the desirables, including the Cow-boy primrose (*Oenothera caespitosa*) with its great snowy blossoms breathing forth sweet fragrance on the evening air. One morning in June there were over thirty flowers on six plants, a truly magnifi-

cent sight. One gentleman said, "I have traveled far and seen many beautiful gardens but this is so different and as a setting for that cabin I have never before seen anything as beautiful and as appropriate."

To the north and east we are planting just as many of the plants found in the remainder of the State as we have been able to get in the short while since taking over the care of the grounds. And it is our aim and hope to make the grounds so pleasing that every city and town in our State that boasts of a park will dedicate some portion if not an entire park to North Dakota plants only and we feel very confident that all the really progressive ones at least will do so.



# Tendencies in the Development of American Horticultural Associations, 1800-1850

BY HAMILTON TRAUB

In the preceding chapter the effect of the growing importance of the horticultural industries upon the rise of a distinctively indigenous horticultural literature was brought out, but it should be realized that parallel with this development, and in response to the same economic causes, another advance was taking place. As the growing of fruits, vegetables and flowers assumed greater and greater magnitude with the advance of the Nineteenth Century, those engaged in these vocations consciously endeavored to solve problems of common concern not individually any longer but collectively. During the time that an adequate economic basis was being created, the driving force of human motives served as the incentive in attempts to adopt means to meet the emergency arising from lack of cooperation.

Although the pioneers who were instrumental in organizing horticultural associations in North America were, in many cases, undoubtedly highly educated, and presumably had a more or less clearly defined purpose in view, it is probably true, however, that as a general rule, those who sponsored these organizations had no well defined aid other than a keen desire to further the advancement of their vocation or avocation. The Massachusetts Horticultural Society, for instance, was organized "for the pur-

pose of encouraging and improving the science and practice of Horticulture, and promoting the amelioration of the various species of trees, fruits, plants, and vegetables, and the introduction of new species and varieties."<sup>1</sup> The aim is stated in general terms for the most part, showing that those who drafted it apparently did not feel free to particularize to any great extent.

If we look deeper than the expressed purpose of the organizers, we shall find that the primary human motive that led to the immediate founding of such associations was undoubtedly (1) the desire for closer contact with others similarly engaged. The actual machinery necessary was then borrowed from a contemporary model,<sup>2</sup> in an attempt to interchange experiences, correct errors, and act in concert in such efforts as the "amelioration of \* \* \* trees, fruits, plants and vegetables, and the introduction of new species and varieties"; and the establishing of experimental gardens, professorships in horticulture and botany. Closely connected with and springing from the above mentioned motive, the will would be born (2) to diffuse horticultural knowledge by means of horticultural exhibitions, the publication of the transactions of the organizations, public lectures, and the creation of libraries and herbaria. Still further efforts to encourage activity in the field would (3) manifest

<sup>1</sup>History of the Massachusetts Horticultural Society, p. 475.

<sup>2</sup>Civilization is cumulative, and one generation builds upon that which a previous one has accomplished. It is a human trait to look for precedents, and in the evolution of human institutions there are few, if any, mutations. Any innovations that are instituted are usually in the nature of adaptations

to actual needs. The pioneers in any field, probably from mental inertia or incapacity, or both, reason that since an institution has accomplished this and that at a particular time and place, the same results may be achieved elsewhere. The resulting natural impulse is then to use the already established method, with few if any changes, for accomplishing the end.



itself by the offering of prizes for honorable competition, and the award of medals for meritorious achievements in horticulture.

#### AGRICULTURAL ASSOCIATIONS, 1785-1818

Prior to 1800, and during the entire period under consideration, agriculture was the chief concern of the American people, and societies for the advancement of general farming had arisen at a comparatively early period. The Philadelphia Society for Promoting Agriculture, founded in 1785, was apparently the first agricultural association organized in North America. The Agricultural Society of Charleston (S. C.), came into existence in the same year. This society was followed by the Nova Scotia Agricultural Society, in 1789, and the Massachusetts Society for promoting Agriculture, in 1792.<sup>3</sup> With the passing of the years associations of this nature were extensively organized in all sections of the country, and horticulture, it is true, was considerably stimulated by the attention devoted to fruit growing.<sup>4</sup> Even after distinctively horticultural associations had sprung up. These agricultural societies, in almost all cases, continued to devote considerable effort to the advancement of horticulture. The most notable example, before 1850, was the New York Agricultural Society, which exerted a potent influence upon the trend of American horticulture until the very end of the period under consideration.

#### THE LONDON HORTICULTURAL SOCIETY

In Europe the situation was similar. No horticultural associations appeared until 1804, when the Horticultural Society of London was founded by such

prominent men as Knight and Banks. The London Society was followed by the organization of the Caledonian Horticultural Society at Edinburgh, in 1809. The Horticultural Society of Paris came into existence as late as 1826.

The London Society was by far the most important of the European horticultural societies, and its fame soon spread far and near. This was in great part due to the fortunate circumstance that Thomas Andrew Knight and later Prof. John Lindley were in official positions in the Society for long periods of years, affording an opportunity for much constructive work. The Transactions of the Society were prepared in elaborate editions. In this form, the scientific papers read before the Society became generally available.<sup>5</sup> By 1825, the membership rolls of the Society were graced by the names of the following prominent Americans: Dr. Hosack, Governor Clinton, Thomas Hogg, William Wilson, Mr. Floy, Judge Buel, William Prince, David Thomas, William Coxe, Mr. Dick, John Lowell, and Samuel G. Perkins.<sup>6</sup> Such a close contact between the influential horticulturists on both sides of the Atlantic led to an active exchange of ideas and plant material. It was only natural, therefore, that the London Society should be the prototype of similar organizations in North America. In adapting the form to American conditions, even the cumbersome administrative machinery was borrowed. Later the adapted institution was subjected to the necessary pruning.<sup>7</sup> The holding of weekly meetings, suitable to the English conditions, also proved out of place, except in a few cases, in a country characterized by magnificent distances, where annual meetings, if any at all, are more practicable.

<sup>3</sup>History of the Massachusetts Horticultural Society, p. 32.

<sup>4</sup>See the files of the American Farmer (Albany) and other early American agricultural periodicals.

<sup>5</sup>See Chapter I, above; see also Transactions of the London Horticultural Society.

<sup>6</sup>History of the Massachusetts Horticultural Society, p. 46.

<sup>7</sup>Ibid., pp. 64-65. The cumbersome "council" was replaced by an "Executive Committee" in the case of the Massachusetts Horticultural Society.



# LOCAL HORTICULTURAL ASSOCIATIONS, 1818-1850

## EARLY AMERICAN HORTICULTURAL ASSOCIATIONS, 1818-1830

The American Horticulturists had the inspiring example of the London Society before them, and when the time came for the founding of similar societies in North America, the premier Society served as convenient model. The New York Horticultural Society, founded in 1818, began under very favorable auspices, for it had among its founders and members such prominent men as Dr. Hosack, Grant Thorburn, Dr. Samuel L. Mitchell, William Prince, J. J. Thomas, Thomas Hogg, Andre Parmentier, Mr. Floy, and William Wilson.<sup>8</sup> The administrative machinery of the society was modeled upon that of the London Society. It was planned that the organization should sponsor an experimental garden, a public lecture hall, an horticultural library, an herbarium, and a professorship of botany and horticulture.<sup>9</sup> At the outset everything seemed favorable and the affairs of the society were carried on with much energy.<sup>10</sup>

In the meantime, a second organization for the advancement of horticulture, the Pennsylvania Horticultural Society, had been founded on November 20, 1827, at Philadelphia. It held its first annual exhibition in the fall of 1830.<sup>11</sup> The people of Philadelphia and vicinity had early taken a very active interest in horticulture, and the Society was a success from the start.

The year following the founding of the Pennsylvania Horticultural Society witnessed the organization of the Domestic Horticultural Society, at Geneva, N. Y. (1828). The first two associations had been modeled

after the London Society, but it was found expedient to repudiate some parts of the administrative machinery borrowed soon after the societies began to function. The feature of the weekly meeting was however retained. With the founding of the Domestic Society, another departure is noticed,—the complete reliance upon an annual meeting. The field of operations of this association covered no less than ten counties in western New York, and it was stipulated that the meetings were to be held in rotation at Geneva, Lyons and Canandaigua.<sup>12</sup>

In 1829 the Albany Horticultural Society was organized with Judge Buel as its first president, and later in the same year, the Massachusetts Horticultural Society was launched in Boston, February 24th, by sixteen public-spirited men, including such eminent persons as General H. A. S. Dearborn, Samuel Downer, John M. Ives, William Kendrick, John Lowell, Robert Manning, Jonathan Winship. At an adjourned meeting, March 17th, General Dearborn was elected the first secretary of the society. The organization thus fully launched began its long career of usefulness.<sup>13</sup>

By 1829 there were in existence at least five promising associations devoted to the advancement of horticulture. The number of such organizations increased gradually during the following five or six years, societies being founded in Baltimore, Quebec, Charleston, S. C., Washington and other localities.<sup>14</sup> But these societies came into existence during a critical period in the development of the horticultural industries. The number of persons interested in horticulture was undoubtedly increasing, but it was uncertain in most localities whether a sustained interest could be maintained, for the fruit, vegetable, and flower

<sup>8</sup>History of the Massachusetts Horticultural Society, pp. 44-45.

<sup>9</sup>Ibid.

<sup>10</sup>American Farmer, Vol. III, 1822, p. 224, Notice of annual banquet.

<sup>11</sup>History of the Massachusetts Horticultural Society, p. 45.

<sup>12</sup>History of the Massachusetts Horticultural Society, p. 45.

<sup>13</sup>Ibid., pp. 55-68.

<sup>14</sup>Magazine of Horticulture, 1843, p. 450.



industries were passing from infancy into a vigorous but undependable youth. A keen observer in the West realized the full extent of the problem for he remarks, "the difficulties under which societies in this country, at present labor, arise more from a deficiency of interest in the public, and the comparatively few gardeners and amateurs among us, than from any defects in the management."<sup>15</sup> The pioneer organizations as a rule had a hard struggle for existence, and many came to an early end. It was comparatively easy for groups of public minded persons to father such associations, but only time could decide whether or not the offspring would survive. C. W. Elliott, a pioneer in this field, remarks, "the greatest difficulty with all things of this kind has been to continue the interest."<sup>16</sup>

#### EARLY SUCCESSES AND FAILURES

Since it is not our purpose to compose a history of the horticultural associations, but rather to develop the general concept of the tendencies in the evolution of such associations in general, no detailed review of all the societies organized during the period will be attempted. In detailing the early successes and failures in the organization and maintenance of horticultural associations, as far as possible, typical cases have been chosen.

The first anniversary of the Massachusetts Horticultural Society was fittingly celebrated on September 19, 1830. The eloquent General Dearborn addressed the members in the picture gallery of the Athenaeum, giving "an interesting \* \* \* view of the origin and progress of horticulture, its various branches, and its effects in multiplying and improving the fruits of the earth."<sup>17</sup> Later the members of the society and their friends number-

ing nearly a hundred and sixty, banqueted at the Exchange Coffee House, on Congress Square. The dining hall had been elaborately decorated with orange trees in fruit, dahlias, roses, "a fine specimen of the India rubber tree," cut flowers, and "numerous baskets of grapes, peaches, nectarines, pears, apples and melons."<sup>18</sup>

At the exhibition of the Maryland Horticultural Society, June 21, 1836, "Upwards of two hundred dollars were given away in premiums." The report of the exhibition of the Horticultural Society of Charleston (S. C.), on July 12, 1836, is highly encouraging: "There was a splendid exhibition of flowers and ornamental plants, natives and exotics, together with such fruits and vegetables as the season afforded. Making all allowances for the destructive effects of the last winter, the protracted spring and excessive rains, yet the exhibition was highly creditable to the Society, to the ladies and gentlemen who were contributors, and to the Committee of arrangements who conducted the proceeding."<sup>19</sup>

The affairs of the New York Horticultural Society had been carried on with much energy for a period of years, but by 1837, interest in the organization began to lag. Some of the most active members withdrew their support and in the resulting apathy the society's future appeared doubtful. All of the hard things which were charged against the New Yorker of that period certainly are not true, for there are undoubtedly extenuating circumstances which a further research will discover. But it is illuminating to read what a member intimately connected with the organization has to say regarding the cause of the decline of the New York Horticultural Society: "I am sorry to inform you," he writes in the *Magazine of Horticul-*

<sup>15</sup>Humrickhouse in the *Magazine of Horticulture*, 1846, p. 210.

<sup>16</sup>*Magazine of Horticulture*, 1843, p. 450.

<sup>17</sup>History of the Massachusetts Horticultural Society, p. 219.

<sup>18</sup>*Ibid.*, p. 220.

<sup>19</sup>*Magazine of Horticulture*, 1836, p. 357, quoted from *Southern Agriculturist*.



ture,<sup>20</sup> "that we shall not have any Horticultural Exhibition this season. It is a disgrace to our city. Whilst the Societies in Baltimore, Washington, Philadelphia, and Boston, are displaying to their fellow-citizens the beautiful as well as the useful products of their gardens, the New Yorkers are so eaten up with avarice and immorality, that they can not afford to patronize a horticultural exhibition, even when tickets are put at twelve and a half cents each. This is not on account of hard times, for we have now six theatres open every evening (and a few weeks ago we had two more, and a circus, in full play,) and they are all crowded. For these five years we have not had an exhibition that has been any pecuniary advantage to the Society, but rather a loss; last year we had a heavy loss, it being quite a failure; people were so engaged in the engrossing of fictitious wealth, that they had not time to admire the beauties of nature, except in so far as building lots, composed of solid rock, or covered with water, were concerned. At our annual election (which requires but thirteen persons to make a quorum, to vote) we could muster ten, so that our Society is virtually defunct. We make a last effort tomorrow night." C. M. Hovey remarks, in the Magazine of Horticulture,<sup>21</sup> in touching upon the sad state of affairs in New York, "A Society with Dr. Terrey at its head, the fine rooms of the Lyceum of Natural History to exhibit in, and located in a city with fine gardens and amateur gardeners, is deserving of a better fate. We hope that the 'last effort' has succeeded, and that the New York Horticultural Society, the first established in the Country, will yet exert that powerful influence which its first founders anticipated." Unfortunately the "last effort" failed and the society, which had been gradually dwindling away, became extinct.

An attempt was made to make good the deficiency created by the extinction of the New York Horticultural Society, by the organization of the Great Horticultural Society of the Valley of the Hudson, in 1838. This organization, with A. J. Downing as secretary, held a successful exhibition September 28-29, 1858: "The splendor of the Dahlias \* \* \* was remarkable \* \* \* upwards of one hundred varieties of apples were on the tables, from the orchards of the President, Judge Buel, of Albany."<sup>22</sup> The association was short-lived, for it apparently held only two exhibitions; one in New York and one in Albany.<sup>23</sup>

Still another attempt was made to establish an effective horticultural society in the vicinity of New York in 1840 when the Brooklyn Horticultural Society was founded. According to the reports in the Magazine of Horticulture: "The Brooklyn Horticultural Society have not held any exhibitions of importance"; "There is some fear that the Society may be broken up"; "very little interest was manifested by the members in the exhibition and \* \* \* the display was not so fine as was anticipated"; "from information derived from a gentleman connected with the Society (it appears) that it will be hardly possible to sustain it under any circumstances."<sup>24</sup> The cause of the early extinction of the Brooklyn Society was undoubtedly the lack of amateur interest.<sup>25</sup>

Although it is true that horticultural societies during the thirties and forties, and even later, had a hard struggle for existence, many becoming extinct soon after their organization, a measure of success was achieved by a fair proportion over a period of years. In 1837, the Charleston (S. C.) Horticultural Society held a successful exhibition in spite of the adverse conditions. The organization was apparently exerting an important influence in the

<sup>20</sup>Ibid., 1837, pp. 389; 449.

<sup>21</sup>Magazine of Horticulture, 1837, p. 389.

<sup>22</sup>Magazine of Horticulture, 1838, p. 462; also pp. 353-354.

<sup>23</sup>Ibid., 1840, p. 4.

<sup>24</sup>Ibid., pp. 446, 430.

<sup>25</sup>Ibid., 1841, p. 336.



community for the "improvements in farming and gardening since the establishment of this Society, have been unquestionably great." The correspondent, however, admits that this may be due to "an improving taste for horticulture and botany, coincident, in point of time, with this establishment."<sup>26</sup>

The autumnal exhibition of the Columbian Horticultural Society of Washington, in 1837, proved a distinct success. The flower, fruit and vegetable exhibits were extensive, and the visitors were numerous and distinguished. The President of the United States, heads of departments, members of Congress, foreign ministers, officers of the army and navy, etc., attended, and swelled the collections to a considerable amount."<sup>27</sup> Interest in the society, however, decreased as time went on, and no annual exhibition was held in the autumn of 1841.<sup>28</sup>

In Philadelphia, a sustained interest in horticulture had been a marked characteristic. Naturally, the Pennsylvania Horticultural Society played a very important part in the horticultural development of the community in which it existed. Its exhibitions were generously patronized even during the days of financial depression in 1837-39, when support in New York was lacking. In 1838 a correspondent writes that the Pennsylvania Society is "in a more flourishing condition than any other in the Country and the interest which the members manifest at the meetings will result in the most beneficial effects."<sup>29</sup> By 1840 the enthusiasm was still on the increase for "no former exhibition can, in all points, compare with the last \* \* \*. The attraction to the public was such, that it was continued a day beyond the limit originally fixed, notwithstanding [the fact that] \* \* \* the

fruits and flowers \* \* \* were diminishing in beauty after the first day. At least eighteen thousand persons testified their gratification by visiting the exhibition, many of them more than once, and giving a minute attention to all that was most worthy of notice."<sup>30</sup> The awards of premiums were so numerous that the prizes in the Dahlia section alone cover almost a page in the Magazine of Horticulture.<sup>31</sup> In 1841, the Library of the Pennsylvania Society contained 370 bound volumes. In the same year, C. M. Hovey remarks, after a trip of personal inspection, the Society's "number of members has greatly increased within the last two years, and its exhibitions \* \* \* have been of the most interesting description. Its annual displays have surpassed anything of the kind in the country, and have been one great means of spreading a taste for plants. Liberal premiums have been offered, and every inducement held out to encourage the amateur cultivator and the nurseryman and florist."<sup>32</sup> The exhibitions of the Society during the following years continued to be successful.<sup>33</sup> On the whole, the activities of the organization were an important influence in the development of horticulture in the region until the end of the period, and for an indefinite period later.

While the Pennsylvania Society was the most influential organization for the promotion of horticulture in the Middle Atlantic States, the most important association in the same field in New England was the Massachusetts Horticultural Society. The exhibitions of the latter Society were among the most notable of the period. The Society early took the lead in the importation of plant material from Europe, and undertook its distribution among its membership. The prize schedule of the Society also is

<sup>26</sup>Magazine of Horticulture, 1837, p. 461, quoted from the Southern Agriculturist.

<sup>27</sup>Ibid., 1838, p. 33, 5; Ibid., 1837, p. 7.

<sup>28</sup>Ibid., 1842, p. 121.

<sup>29</sup>Magazine of Horticulture, 1838, p. 465.

<sup>30</sup>Ibid., 1840, p. 34.

<sup>31</sup>Ibid., 1840, p. 37.

<sup>32</sup>Ibid., 1841, p. 416.

<sup>33</sup>Ibid., 1841, p. 458; and later issues.



worthy of notice. Although the amounts awarded for premiums during the early years of the Society were small, the total amounted to \$1,200 for the year 1845, and this was gradually increased until the Civil War when there was a temporary decline.<sup>34</sup> In 1831 the Massachusetts Horticultural Society purchased Mount Auburn Cemetery. The "fee of the land" was vested in the organization, but the cemetery was to be administered by a Garden and Cemetery Committee upon which the purchasers of lots in the Cemetery were represented. This arrangement did not prove satisfactory. In 1834 "it was perceived that the interests of the proprietors of the lots in the cemetery and those of the other members of the Horticultural Society were too unlike to be successfully united in one corporation. The most important point on which a difference of opinion and interest existed was the division of the proceeds of sales of lots between the two branches of the establishment,—the experimental garden and the cemetery \* \* \* On the question of legal and moral right it was found that the Horticultural Society held the fee of the land, and that to it was due whatever credit belonged to the inception of the undertaking. On the other hand, it appeared that the number of lot holders was rapidly increasing; that from the condition of purchase, that upon paying for his lot, every subscriber should be a member for life of the Horticultural Society, they would soon have a controlling vote in its affairs."<sup>35</sup> The matter was amicably settled by the sale of Mount Auburn to a new corporation composed of the holders of lots. The conditions of sale provided "that the proceeds of all sales should be divided annually between the Horticultural Society and the new corporation, in such manner, that,

after deducting fourteen hundred dollars for the expenses of the cemetery, one-fourth part of the gross proceeds should be paid to the Horticultural Society, and the remaining three-fourths should be retained by the Mount Auburn Corporation for its use."<sup>36</sup>

The membership in the Massachusetts Society was never large in numbers but the character of those connected with it was such that this made up in great measure for the lack in quantity. The following table shows the membership for various years during the period:

<i>Year</i>	<i>Number of Members</i> <sup>37</sup>
1829.....	249
1836.....	350
1838.....	246
1846.....	438

A study of the table shows that the number of members fluctuated between 249 and 438 during the years before 1846, surely not an imposing showing when it is remembered that this was one of the most successful of the societies devoted to horticulture during the period. It was therefore in great part due to the "fortunate connection with Mount Auburn, and the integrity and skill with which its revenues [were] administered by its finance committees and treasurers that the Society was enabled to erect a hall in 1845 at a cost of \$37,682.78, which was derived from the sale of stocks in which the surplus funds of the Society had been invested; from the Society's proportion of the proceeds of sales of lots in Mount Auburn, and from a loan, secured by mortgage, of \$15,000, at five per cent per annum." By 1849 the amount of indebtedness had been reduced to \$10,000.<sup>38</sup> Besides the money invested in the hall, the ordinary expenses of the society were also defrayed from its income. After 1850 the financial strength of the So-

<sup>34</sup>History of the Massachusetts Horticultural Society, p. 131.

<sup>35</sup>History of the Massachusetts Horticultural Society, p. 109.

<sup>36</sup>Ibid., p. 111.

<sup>37</sup>Ibid., p. 121.

<sup>38</sup>History of the Massachusetts Horticultural Society, pp. 136-138.



ciety increased rapidly with the result that still greater tasks were undertaken.

No small part of the success achieved by the Massachusetts Horticultural Society is attributable to able leadership, and the fortunate connection with Mount Auburn Cemetery. Whereas the horticultural societies in other parts of the country depended almost wholly upon the sustained voluntary interest and support of individuals for their continued existence, the Massachusetts Society was in a unique position, and had an independent source of income. It is this latter circumstance which gave it the relatively higher degree of stability as compared with most other organizations of a similar character.

#### THE INCREASE OF HORTICULTURAL ASSOCIATIONS, 1829-1845

The enviable successes achieved by certain of the early horticultural associations undoubtedly was a factor in stimulating the further increase of such organizations. But this factor should not be overemphasized as illustrated in the work of the zealous historians who composed the interesting and valuable but hardly critical History of the Massachusetts Horticultural Society. In the review of the influence of the Society upon the country as a whole, the following statements are inserted, "This Society \* \* \* has had a direct tendency by its example to cause their establishment, and lead to the success they have attained. And its example has been felt beyond New England, not only in causing new societies to spring up through the land, but in putting new life into older societies by the generous spirit of emulation awakened."<sup>39</sup> These statements, however, are open to question. The point arises as to which comes first as a deciding factor, the example or the need. The Southern States had the same

example before them that was presented to the Northern tiers of States, but few horticultural societies were organized in the South. Apparently there is a direct relation between the growth of the horticultural industries and the founding of such associations. It is significant that the main activities of most of the early societies centered upon pomology, the branch of horticulture of greatest commercial importance. It appears, therefore, that the deciding factor in the increase of horticultural societies was not merely the example of, but the need for, such institutions which were founded when the industries upon which they were based had developed sufficiently to give rise to an intermittent or a sustained interest in horticulture.

After the late 30's hardly a year passed without additions to the number of horticultural societies in this country. In 1838 Hovey published in the Magazine of Horticulture several references to horticultural societies lately organized: The New Haven (Conn.) Horticultural Society staged a successful exhibition in that year according to reports, and the Middlesex (Mass.) Horticultural Society conducted an exhibition that was well attended. In 1840 appears a notice of the Worcester Horticultural Society, which was organized in that year.<sup>40</sup> In Cleveland "an attempt will be made \* \* \* the ensuing Spring." In 1841 the American Institute of New York City staged its first horticultural exhibition, and the Louisville and Jefferson County (Ky.) Horticultural Society was organized. In 1843 notices of the Horticultural Society of Cincinnati, and the Mississippi State Horticultural Society (Vicksburg) first appeared. In 1844 the Queens County Horticultural Society (L. I.) was organized, the title being later changed to Long Island Horticultural Society. During this year it appears that another attempt was

<sup>39</sup>History of the Massachusetts Horticultural Society, p. 454.

<sup>40</sup>Societies are being talked of in other places.



made to organize an effective Society in New York. In 1845 reports of The Agricultural, Horticultural and Floricultural Club of Northampton (Mass.), the Buffalo Horticultural Society, the Columbus Horticultural Society,<sup>41</sup> and the Rochester Horticultural Society were published in the Magazine of Horticulture.

### 1846-1850

Up to 1846, C. M. Hovey had made a determined effort to publish in the Magazine of Horticulture comparatively complete reports of the activities of all the horticultural societies that were interested enough to submit the facts, but the very rapid increase of such associations necessitated a change of policy—"We depart somewhat from

<sup>41</sup>Ohio Cultivator, Vol. I, p. 149. Columbus Horticultural Society organized April 10, 1845.

our usual plan of giving the reports in detail of the various Horticultural Societies," writes Hovey in 1846, "they have now become so numerous that it would require more room than we have at our disposal to give them entire." An incomplete list of the additional horticultural associations organized by 1848 includes: The Chester County (Pa.) Horticultural Society, the Albany and Rensselaer Horticultural Society, the Montreal Horticultural Society, the Burlington (Vt.) Horticultural Society, the New Bedford Horticultural Society, the Maine Pomological Society, the Genesee Valley Horticultural Society (at Rochester), the Steubenville (Ohio) Horticultural Society, the Pittsburgh Horticultural Society, the Springfield (Mass.) Horticultural Society, the Rockingham Horticultural Society, the Rhode Island Horticultural Society. After 1848, the number of such associations increased steadily.

## Primulas

By E. H. M. Cox

*Reported with permission by Sherman R. Duffly*

It is very comforting to learn that the rarer primulas sometimes die for experts just as they do for the common people. It is heartening to know that experts sometimes find that seed won't germinate just as it disappoints many of the inexpert. It is with a feeling of personal vindication that one learns that experts sometimes swear at certain refractory primroses even as you and I.

For these reasons Mr. E. H. M. Cox, distinguished Scotch editor, author and plant explorer, speaking on the subject of primulas, proved to be the most consoling lecturer to whom this writer ever had the pleasure and privilege of listening. Mr. Cox delivered his primula lecture in Chicago on October 30 before an audience many of whom had

dallied with primroses quite extensively.

The lecture became to some extent an exchange of experiences with primroses in the Chicago districts and their behavior in English gardens. We are dependent here largely upon Mrs. Percy Armstrong of Glencoe, Illinois, for primrose information. She has endeavored to grow some 70 species and has succeeded with 50. That she hasn't tried more is because she couldn't obtain the seed. Mr. Cox kindly offered to assist in obtaining seed for trial here.

"Primroses," Mr. Cox said, "are a new phase of English gardening and a very important one. There are a fair number of kinds you can grow here. While you can not import plants,



primrose seeds are very small and they can be obtained. Before going any farther, I shall tell you where you can get seeds. The principal dealers are my friend, G. H. Dalrymple, Bartley Nurseries, Southampton, England; Holabird & Hunter,—here you have some tongue twisters but no worse than your Poughkeepsie,—Moniave, Dumfriesshire, Scotland, and Thompson & Morgan, Ipswich, England.

"There are three distinct groups into which primroses divide themselves,—greenhouse primroses, with which we are not now concerned; the European alpine, which have such individual requirements that were I to try to tell them I would be talking until next week, and the Asiatic and American primroses, for we grow more American primroses than you do, particularly your *suffrutescens* and *Rusbyi*. We have, I think, seven American primroses. These two are very fine. It may be carrying coals to Newcastle to tell you that you can get them from Carl Purdy.

"The important factors in their culture are sharp drainage and continuous moisture during their growing season, particularly from April to June. Much the same conditions are necessary for seeds. I use one-third good garden soil, one-third peat moss and, if the soil is heavy, one-third sand. Continuous moisture is necessary for good germination with good drainage."

(The Garden Club of Illinois, under whose auspices the lecture was delivered, provided a typical English day, heavy fog enveloping the city and suburbs, so dense that many had to abandon the trip to the lecture. Mr. Cox protested in advance that he was Scotch.)

"The plants even in England, which has a different climate from yours as closely as to-day's fog resembles an English day, are best in three-quarter shade,—that is, not more than three or four hours of sunshine a day. We plant them underneath shrubs, in copses, among trees in thin woods, particularly birch woods, in oak woods

if not too thick, and a friend of mine who admires your maples has them in a maple wood and they are doing finely. Here, I imagine, six hours of shade and two hours of sunshine would be best. One hour in the morning and one in the late afternoon would be an ideal arrangement.

"Our difficulty is wet winters, which I understand you do not have." Some of the audience explained that we were sometimes similarly afflicted. "The danger is rotting of the crowns. We find that we should remove the leaves the moment they begin to die off. This greatly reduces the danger of crowns rotting. We have in England the chase continuous cloche, made of forked wire into which a pane of glass is slipped and which is placed over the primrose. They should be easily made."

NOTE.—A wax paper cloche has been placed on the market this year by American dealers, which is under experiment for such cases.

Mr. Cox then displayed a number of slides of various primulas, commenting upon them while the audience asked questions at times or told of the behavior of the particular plant shown. The first slide shown was *Primula winteri*, which is unknown in this district. Mrs. Armstrong said she had been unable to obtain any germination.

"This belongs to the *Petiolaris* section," Mr. Cox said. "There are a number of Asiatic primroses in this section but this is the only one we have been able to grow. The *Petiolaris* section has an odd seedpod. The seed is formed on a flat disk that has a transparent top or cover that looks like celluloid. This breaks while the seed is quite green and it is scattered upon the soil. There is some process that goes on in the soil that we do not know about that assists in germination. That is the reason we have had so little success in trying to grow this group from seed. The seed must be planted when the pod breaks. This species is a beautiful light lavender.



The American primrose *Rusbyi*, native to the far western mountains, which grows well in England but not so well in this part of the country, was next shown. "*Rusbyi* is of the Nivalis section," Mr. Cox said. "This is characterized by very smooth leaves. The plant has handsome lavender flowers. Another of this section is *sinoplantagines*. It wants considerable peat in the soil, as does *Rusbyi*. *Melanops* is much the same with a dark eye.

"We now come to the Candelabra section,—*Beesiana*, *Japonica*, *pulverulenta* and others. *Pulverulenta* is the most popular primrose in England. Originally it was a purple magenta but a salmon colored type appeared at my friend Dalrymple's and he has bred a strain that comes 90 per cent true in beautiful pinks, salmons and rose."

This is sold as the Bartley strain and has fully justified the praise given it by Mr. Cox in Chicago gardens, an easy grower and a beautiful mass.

At this juncture Mr. Cox brought much consolation to some of us who have sworn at *helodoxa*, for we learned that it was *helodoxa* and not our culture that was at fault.

"*Helodoxa*," the lecturer continued, "is a fine yellow Candelabra, the tallest of the class sometimes having seventeen tiers of flowers. Unfortunately it is not very hardy. It will stand a few degrees of frost. We had 28 degrees last year and large numbers of them were destroyed. I was more fortunate and think I can safely say I have now the largest stock in the country."

"What do you do when it freezes like that?" one of the audience asked. "We say good-bye to them," Mr. Cox answered. We now know what was the matter with *helodoxa* with 20 below zero weather.

"*Burmanica* is a very fine primrose of this section.

"Candelabra primroses need to be divided frequently, about every third or fourth year. They make two

crowns at least a year and when they have become crowded the stalks are not so good." Mr. Cox then showed a slide of an old clump which should have been divided and a bed of newly divided *japonicas* in bloom, their sturdier stems illustrating the point emphatically.

"You see the character of the fine stalks on the divided plants," he commented.

"The next section we come to, is Sikkimensis. We have *flexilipes* from South Thibet. Another is *microdonta*. (This grows well in Chicago.)

"But the most important and largest of all primrose introductions is *Florindae*, discovered by Mr. Kingdon Ward and named for his wife. It has huge foliage and makes stems sometimes four feet high and is most imposing in mass. The drooping flowers are soft yellow. It is nearly biennial and I am throwing it out of the garden in quantity as it has practically taken possession of it. It is very easily grown."

Mrs. Armstrong commented that it seemed more nearly perennial here as her plants were three years old and seemed strong and healthy.

"It doesn't make any such height here," she remarked.

"I think it would if given plenty of shade," Mr. Cox said. Mrs. Armstrong's *Florindae* plants get morning sun.

"*Sikkimensis*" itself, continued Mr. Cox, "is a very beautiful primrose and fairly easy. *Secundiflora* of this section is a beautiful thing, violet with dark purple calyces. It needs to be kept fairly dry. When it was introduced instructions were given in detail as to the difficulties of its cultivation and under these directions it did not thrive, but we have found that it grows under ordinary primrose cultivation with moisture and drainage, but it must be kept fairly dry outside its growing season."

*Saxatilis* was next shown. Mrs. Carl Miner, Chicago's rock garden pioneer asked a question that has puz-



zled many of us who have primrosed around. "But does it differ from *cor-tusoides*?"

"They are very nearly the same," Mr. Cox replied.

"*Lichiangensis* is another of this type.

"*Littoniana* in England is known as the poker primrose because of the shape of the spike. The flowers are lavender and the calyces red. We regard it as biennial in England." Mrs. Armstrong finds it longer lived in her garden and has three-year-old strong clumps.

"*Rosea* is one of the very beautiful primroses, low growing but a lovely pink. It will stand more moisture than many of them. I don't know whether you can grow *Juliae* here or not. It is a fine low-growing primrose with purple blooms." *Juliae* grows successfully here.

"*Forrestii* has a peculiar growth in its native land, China, with long woody stems." A slide was shown of a plant depending apparently two or three feet from a crevice in perpendicular rock, a ragged stem terminating in a cluster of leaves and flowers. "This primrose

photographed in its native land was estimated to be at least fifty years old. It is yellow-flowered and easily grown if the crown is kept dry.

"*Denticulata* has a typical globe-shaped head which has the blooms standing erect. I have been asked how it differs from *capitata*. The blooms in the head of *capitata* droop, leaving the center flat. The variety *Mooreana* is very fine." The variety *crispata* is a favorite here with royal purple heads set off by contrasting white meal.

"*Vinciflora* is a primrose with which the botanists have played tricks, sometimes calling it an *Omphalogramma*, but now they seem to have agreed it is a primrose. It has a single flower to a stem, a beautiful blue, outstanding in its lower part like a violet, a sort of prognathous jaw. I have tried it again and again and the dealers from whom I have so often sought seed have made remarks about my cultural ability. This primrose has caused me to do more swearing than any other. It is a beautiful thing and well worth all the effort."

This writer has not sworn at this primrose—yet. He hasn't tried it.

## A Shopper's Guide

The January issue always provides a last chance for recording the several things that have been forgotten or overlooked in the last year, for the New Year's lists are not upon us at the time of publishing and we have the last moment of rest before the new orgy comes on.

Christmas roses, a veritable term for conjuring up pictures of delight and then aggravation when one comes to search for plants—but they may be had, or at least are listed, by two nurseries in New York State. And in one of these same lists one will find an astonishing list of colchicums and *eremurus* which should intrigue those

who like a burst of bloom in October and an adventure in strange bulbous plants for spring when the foxtail lilies push up their spectacular flower columns.

In a Georgia list one finds *Dasylyrion serratifolium*, that relative of the agaves that has a less robust grace. How far one may risk it in regions of frost, much less regions of freezing, we do not know. Perhaps some one with a present passion for succulents and their allies can tell.

From a Massachusetts list, as well as from their Ohio home, comes word of the new Betscher *hemerocallis*, many of them gorgeous varieties for mid-



summer flowering and a veritable boon for the gardener who wants flowering perennials for midsummer.

*Iris gracilipes* of tiny and fragile charm seems to be making headway again in American lists but still commands large prices for its small stature.

Jumping to the other end of the scale, we might mention bamboos, plants of exotic and unusual charm, but in many cases with invasive and commandeering habits. These are often difficult to find and when found are expensive and slow to establish in full beauty. For regions where their fine foliage is not too much damaged by winter sunlight they are worth the trouble of searching for in Texas, Florida, California, Louisiana, Georgia, and even Pennsylvania.

From a little nursery in Alabama comes word of Purple Roman Hyacinths—a dubious term but perhaps the lovely loose spiked sort that can sometimes be had from Virginia gardens, where they flower with *Narcissus spurius* and *albicans*.

In several California lists one finds *Chlidanthus fragrans*, a tender (to winter cold) Amaryllis-like plant with golden flowers of sweet scent as the name

denotes. As one of the one-time items of Autumn bulb lists, it is good to see this name again.

Almost beyond belief is the mention of *Daphne genkwa* of more delicate and airy charm than the *Mezereum* shown in this issue.

*Primula florindae* is noted from Vermont and from several special lists elsewhere.

Two alliums from the same nursery, one rejoicing in the bare name of Ruby Gem and the other unnamed, catch the editor's eye for he has a taste for onions. Beside these he has planted, eventually for the Gardener's Pocket-book, three species from Colorado, one from Idaho and a collected—as yet unnamed—form dug up in Wyoming, as well as more garden tamed sorts from Michigan and elsewhere.

For the fortunate or unfortunate persons who live within the Japanese beetle zone there are plants of *Gordonia alataamaha* (illustrated on page 2 of January, 1929).

And for the reader who would pursue the hens-and-chickens adventures of the staff there is a list of American dealers which will be sent for the needed asking and stamp and envelope.

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## A Book or Two

*Rock Gardens*, by A. Edwards. Ward, Lock & Co., Ltd., London, 1929. 320 pages, illustrated.

Mr. Edwards, the Assistant Curator at Kew, in charge of the rock gardens, has prepared a rather comprehensive book on the subject with chapters included on bog and water gardening. It is written with great simplicity for the use of the beginner who is genuinely interested in commencing the construction of a rock garden and the cultivation of plants of this kind.

Rock gardens of size are in mind as the general encyclopedic list of plants

contains many trees and shrubs which would quickly overpower any modest garden. The reader must plan his choices, therefore, according to the dimensions of his plot and develop the proper sense of scale which is so important in all rock garden work.

*Blumenbuch. Die Blume im Haus in Vergangenheit und Gegenwart*, by Hanna Kronberger-Frentzen. Herman Reckendorf, Berlin, 1928. 31 pages, 64 illustrations.

A very interesting small volume in



which at least the sixty-four full-page illustrations should be of use to garden clubs that insist upon flower arrangements. Here, following reproductions of ancient flower pieces in mosaics, oil paintings, and etchings, one finds four copies of Japanese flower arrangements taken from some book of instructions and then turns to the remaining modern examples of which only six show distinct Japanese influence. Among the rest one finds several mixed bouquets, one of field flowers, all of which are most interesting to study in their present monochrome reproduction, establishing as they do their success based upon composition in texture, line and mass without the distractions of color.

*Perennials of Flowerland*, by Alice T. A. Quackenbush. The Macmillan Company, New York, 1929. 258 pages, no illustrations. \$1.50.

This is not an important book as it

smacks too much of compilations and as a compilation is curiously arranged and not well planned. The actual text is pleasant enough, but the scheming is more conspicuous and is not justifiable. There is no point in making a great display of the scientific terminology of the orders and then arranging them in alphabetic sequence, an arrangement that makes strange bedfellows. The lay gardener should know these names and orders but he should learn that they have a relationship in blood and form; but he will not find it here where the Lily Family has the Legumes for neighbors on one hand and the Flax Family scantily represented on the other! The blurb on the cover suggests that this is a pick-up book, but even that is unfortunate for the brief notes are very incomplete, often inaccurate, and show an outrageous number of typographical mistakes of which *spagnum*, *octapus* and *minosas* will serve as examples.

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## The Gardener's Pocketbook

CAMPANULA PIPERI

AMERICA'S MOST BEAUTIFUL NATIVE  
BLUEBELL

It is hard to believe that so strange a quirk of geological transformation could actually transplant some two thousand miles or more what is supposed to be the only *campanula* of its kind in America, from the elevations of Mt. McKinley in Alaska, where it is found in a closely allied form—*Campanula aurita*—and then find no trace of it again until one comes upon it high up in the Olympic Mountains, the farthestmost western mountain range in the State of Washington, where some years ago this beautiful and distinctive *Campanula piperi* (see page 33) was

discovered lining crevices and rocky stretches towards the summit of Mt. Steele.

Surely one is filled with sincere appreciation of the creative powers of the Infinite when, as did our party one recent September morning emerging from without the smoke-befogged trail of the low divide, we ascended the high slopes of Mt. Christie and there above us beheld patches of *Campanula piperi*, so blue, so vivid, and so clearly outlined against the copper coloring of the iron-impregnated talus slopes that at first glance one almost thought it must be the reflection through a rift of clear blue sky.

I can realize something of the indescribable joy Farrer and others must



have experienced when, on their quest for the dainty China-blue *Campanula rainieri*, they suddenly came upon it filling every crack and cranny of the precipitous and rocky Bergamask, for *Campanula piperi* is no less beautiful, and indeed quite similar in all its habits. Instead of being a *rotundifolia* type as erroneously described and put out by some dealers and growers of rock plant material, it is as altogether different as can be, and is entirely like a beautiful and glorified *Campanula garganica*, with the quaintest little glossy, holly-like leaves imaginable, to be accurately described botanically, as saliently dentate and spatulate, but in every-day sort of language, just the daintiest wee holly leaves, prickles 'n' everythin'.

Strange to say *piperi* is found on only a few of the peaks in the Olympic Mountains. It is quite abundant on Mt. Angeles, Mt. Steele and Mt. Christie, but on Storm King, Constance, Carrie and other peaks there is little or none of it at all, and indeed *Campanula piperi* is not the only alpine that has found its way down, supposedly through the ice floes (as the one-time glacial ice cap must surely have covered the entire country in this region, and one can distinctly detect, especially on Mt. Angelus and Mt. Olympus, the "boulder line" to the depth of 3,500 feet or more).

It is interesting to note species of *Senecio*, *Polemonium*, *Epilobium*, *Synthyris*, *Violas*, etc., which are peculiar to this location alone, and such other things as *Sieversias*, *Smelowskias*, *Romanzoffia* and many other distinct types of Alaska tundra flora, smacking of a decidedly Russian and Siberian atmosphere, acclimating themselves beautifully at 3,000 feet. One finds promiscuous developments of lowland, sub-alpine and high alpine types all growing and blooming happily together in wonderful combinations.

*Campanula piperi*, when once established at sea level, has a splendid disposition and takes readily to any sunny crevice in the rock garden, pro-

viding it has been filled with plenty of chip-rock and a mixture of sand, peat and humus. I have it in my garden harmonizing beautifully with the clear pink of the native western *Silene hookeri*, the soft mauve of the quaint little *Linum salsoloides nana*, the pale yellow of *Draba brunneifolia*, and nearby is a dear little *potentilla* shrublet, *Dasiphora fruticosa*, and I can scarcely wait until the balmy days of another season bring forth the bloom that will once again thrill me with the joy of that wonderful morning when I beheld *Campanula piperi* for the first time. I am sure this little campanula will be heralded as a rare treasure among choice alpine when it becomes better known.

EDITH H. BANGHART.

Medina, Washington.

*Daphne mezereum* L. (See page 34.)

In his "Alpines and Bog-Plants," Farrer writes: "In almost every cottage garden in March you will see the bare, leafless twigs of the Mezereon clothed along their length with its big magenta flowers, armed with a fragrance, keen, sugared, bitter, curiously ominous of the malevolent poison lurking in the whole plant and concentrated in the glossy scarlet berries that succeed its bloom."

Here, in a sentence, is a sketch of this rather low and somewhat awkward shrub which tempts the gardener in earliest March. Like other daphnes, it has large and fleshy roots somewhat impatient of disturbance and like other daphnes is said to be a lime-lover. In the writer's garden it flourishes well enough in a deep and acid azalea compost. What it might do if an alkaline soil were possible is to be guessed. At any rate one should admire it for its earliness for it flowers with the first frost-nipped, naked jasmine and pale, fragrant honeysuckle. A sprig or two with some budding stalks of the Korean rhododendron and a forced spray of Thun-





Herbert C. Moss

*Campanula piperi*

[See page 31]



*Lilian A. Guernsey**Daphne mezereum*

[See page 32]





*Lilian A. Guernsey*

*Rosa gentiliana*

[See page 36]



berg's spirea will make a fine bit for the March window-sill.

Washington, D. C.

*Rosa gentiliana* Lev. (See page 35.)

Among the several species of climbing roses which China has sent us for our gardens, this is perhaps more useful in the South than in the North, for in severe winters its strongest shoots are sometimes seriously cut back.

In a general way one might compare it to the hardier *Rosa multiflora*, that prolific parent of so many ramblers, but it is a more elegant plant with a smaller growth, more shining leaves and a grace of bloom that is more refined. The leaves have a deep green color, somewhat lighter beneath and often tinted with lavender in the youngest stages. The flowers are white, sometimes faintly rose-tinted in the bud and are followed by clusters of round, orange hips that last well into the winter.

Do not plant it, however, where room is lacking, for in health it will outstrip any Rambler, and form a vicious, thorny tangle, proof against all invasion.

Washington, D. C.

*Kniphofia mirabilis albida* Hort. (See page 2.)

To those persons who do not admire the common redhot poker, one might recommend this sort which is listed in an English seed list and may be treated as a tender annual, starting the seeds in late February or early March. If the little seedlings are given rich fare and a soil with ample drainage, they will be ready for bedding along with ageratum and petunias.

Unlike their more robust relatives, these make slender, grassy plants, scarcely a foot high and overtopped by spikes of flowers little larger than those in the illustration. The mature flowers are white and the buds every conceivable shade of coral pink and pinkish orange.

Washington, D. C.

# NEGLECTED NATIVES: 3. ARUM HEART-LEAF

*Hexastylis arifolia* (Michx.) Small. (See page 37.)

The litter under Rhododendrons, Kalmias, and other shrubs of similar soil preferences is usually so acid that it discourages the growth of most ground-covering plants, leaving the surface brown and bare. In some situations the effect of the shrubbery can be improved by putting in tolerant creepers which spread into extensive colonies, such as Bugle (*Ajuga*), Ivy (*Hedera*) and Periwinkle (*Vinca*). Under other conditions, however, and especially in restricted plantations, ground-covers which form individual patches may be more desirable. Several of our native species are decidedly ornamental when used in this way, but have not received the attention they deserve. One of these is being made the subject of this note.

The genus *Asarum*, as founded by Linnaeus, includes two distantly related sets of species, one having deciduous leaves and long-stalked flowers with their styles united, and the other, evergreen leaves and short-stalked flowers with separate styles. Recognizing the distinctness of this second group, Rafinesque applied to it the genus name *Hexastylis*, and as any layman can readily distinguish the two, it seems desirable to keep them separate in horticultural classification as well. The common name Wild-ginger, used in Standardized Plant Names for all of these plants, may then be restricted to the deciduous genus, *Asarum*; to the evergreen one, *Hexastylis*, it seems appropriate to apply the name by which its members are universally known in the south, namely Heartleaf.

The most attractive member of this group, the Arum Heartleaf, is a native of open woods in many parts of the southeastern United States, ranging north only to the southern edge of Virginia, though reaching sufficiently high altitudes in the Alleghanies to





Edgar T. Wherry

*Hexastylis arifolia*

[See page 36]

indicate a considerable degree of hardiness. It blooms in early spring, the flowers being curious little jug-shaped bronzy green objects; lying as they do, crowded close against the crown of the plant, they suggest a litter of tiny new-born animals, and the species is locally known as the "little pig plant." At this season the leaves of

the preceding year are prostrate on the ground, but fresh ones rapidly take their places as they wither, so that the plant is always ornamental. Each stem bears but a single leaf at a time, but as numerous stems radiate from one crown, a mature plant takes on a striking rosette habit. This is shown in the illustration, which represents



*Lilian A. Guernsey**Rhododendron mucronulatum*

[See page 40]





Lilian A. Guernsey

*Berberis pruinosa*

[See page 40]



one about ten years old in the writer's garden, two feet in diameter and six inches in height. The leaves are attractively mottled with white, somewhat suggesting those of the Persian Cyclamen, and forming a pleasing contrast with the brown litter beneath, especially during the winter.

Propagation can be accomplished by division of the fleshy crown with a knife, or by collecting and planting seeds. As to soil, the chief requirement appears to be a moderate degree of sterility. The plant pictured originally grew in a clayey soil under shrubs in a Georgia pine forest, and has been transplanted into a similar situation, the needles being allowed to accumulate around it. The soil reaction is here, of course, decidedly acid, but high acidity does not seem essential, for another clump was collected in neutral clay on a Tennessee limestone barren, and is thriving in soil of that character. One or two dealers in native plants in the North Carolina mountains supply this species as well as its relatives, Virginia Heartleaf (*Hexastylis virginica*) and Mountain Heartleaf (*H. shuttleworthi*). The two latter differ from the one here pictured in having more rounded leaves and bell-shaped flowers. All of the species vary considerably from one individual to another in the outline and degree of mottling of leaves, and any one who has in his garden a bare spot under shrubs will find it worth while to try out a few of these interesting Heartleaves.

E. T. WHERRY.

Washington, D. C.

*Rhododendron mucronulatum* Turcz.  
(See page 38.)

The Korean rhododendron must suffer for that prejudice that damns all flowers that wear a magenta or near-magenta hue. Various extenuating graces are present to counteract this fault, however, not the least of which is the fact that its blooming comes upon the very heels of winter.

The forsythias are in early glory and the red buds of the Japan quince are breaking, but woe betide the gardener who gives it such company. Choose rather black-green evergreens or such plants as Thunberg's spirea, with its diaphanous yellow-green leaves and white flowers, and set it in a site where the light will shine through its petals which are translucent and not opaque as in some sorts. Select also a place where spring frosts will not settle or you will lose your blossoming.

The plants grow quickly when young and send up tall, leggy shoots topped with clustered flower buds as in the illustration and only later assume the twiggy and well-clothed appearance characteristic of their later habit.

The leaves persist late into the autumn and even into early winter, often showing first bronze-purple and then yellow and scarlet colors before falling.

A white-flowered form has been reported by botanists and it is to be hoped that somewhere among the annual crops of seedlings such a form will appear again to add another color to the earliest spring garden.

Washington, D. C.

*Berberis pruinosa* Franch. (See page 39.)

Among the broad-leaved evergreens are some which extend their northern limits of hardiness by becoming more or less deciduous without great injury to their life and health. The lovely swamp magnolia of the East and South (*Magnolia glauca*) is a case in point, showing almost completely evergreen character in southern Georgia and almost completely deciduous character no further north than Maryland.

The barberry of this note is more or less of this nature for its rather thin evergreen leaves are easily ruined by a severe freeze and then drop off very neatly instead of half curling and browning on the stems as do other equally tender plants. One should bear





*Lilian A. Guernsey*

*Cotoneaster zabelli*

[See page 44]





*E. L. Crandall*

*Iris unguicularis*

[See page 44]





*Lilian A. Guernsey*

*Narcissus, Nobility*

[See page 44]



this in mind if he is really after an evergreen species and lives where frosts of twenty degrees or more are common. As to the extreme limit of hardiness to cold we have no data on hand but it is unlikely that the plant would succeed far beyond Long Island in the East.

The species makes a robust plant up to seven or eight feet with almost as much spread, with strong rather erect shoots that branch most in the crown. They are well armed with stiff and vicious spines and carry an abundant covering of green leaves made conspicuous by the white coating of bloom on the under surfaces. The flowers are plentiful in the spring and like most barberry flowers are much sought after by the bees that make a pleasant humming in the branches in late March and early April. As the blooms are a rather pale greenish yellow, they do not make a great show, but they are followed by a plentiful supply of black berries entirely covered with a dense coat of white bloom, like the most powdered of any grapes. These berries on their reddish stems make a charming effect and a branch cut in November will make as delightful a decoration as could be wanted.

Washington, D. C.

*Cotoneaster zabelli* Schn. (See page 41.)

Among the cotoneasters this species dedicated to Zabel is not especially a newcomer and beside some with greater charm of growth or redder red berries may seem a sort of second fiddle, but with the gardener who sees the delicate graduations of form and line, who delights in the tender progressions of hues, it will have a place.

Its over-arching shoots form a great mound some four feet high and half again as wide, not dense like a spirea but with an airiness that shows the structure of the plant, bent down by its branches, covered with fine small

leaves and in autumn by the numerous clusters of rather dull red berries.

Washington, D. C.

*Iris unguicularis* Poir. (See page 42.)

Here is an iris for the South, for those States where flowers may venture out during the winter months. It belongs in that considerable company of plants which are rather hardy to cold as far as their root systems are concerned but suffer if grown too far north by the winter damage to their leaves which persist or which appear too soon.

In some ways it suggests some of the species native to our Pacific Coast and in others our tiny *Iris verna* of the Appalachians. Grown happily, it forms great tussocks of touseled and sometimes shabby leaves, through which rise the exquisite blooms of transparent iris lavender or sparkling white, touched a bit in the falls with gold and frosted with gold dust deep down into the tube.

If the day be warm, the standards fall back as in the picture, and from the flower comes a delicious, almost violet-like scent.

As the flowers are stemless and rise through the foliage by the length of their perianth tubes, they are not much use for cutting, just as crocus can not be gathered with safety; but if one cuts off the base of the leaf-sheathes as well, the opening bud will unfold in the house.

Washington, D. C.

*Narcissus*, Nobility. (See page 43.)

This handsome Dutch sort, whose garden parent has not been discovered, may be taken as a fine example of what the breeders are producing now in the Barri section. The illustration shows without further comment the perfection of the flower form, the regularity of the almost white perianth, and the perfection of the flat, deep orange cup. In it are the excellences of the show flower and also the robust vigor and health necessary for garden use.

Washington, D. C.





*Lilian A. Guernsey*

*Lilium henryi*

[See page 46]



*Lilium henryi* Baker. (See page 45.)

Henry's lily is often spoken of as the yellow *speciosum* because its flowers resemble that species in their general formation and carriage, but the plant itself has a markedly different carriage and a tendency to rise in the world and then stand on its head, that is quite different from the strong upward sweep of the stalks of the showy lilies.

To the present gardener, it seems a much over-praised sort, for aside from its vigor, ease of growth, and general freedom of flowering, it has less to commend it than some of its more difficult sisters. To be sure it fills the season between the robust and universal tiger lily and the later *speciosums*, but it must be staked to hold its flower heads where they belong and it should be planted in light shade in order that the clear apricot orange of its petals be not burned to a blistered white. Given these aids and deep planting in such soil as one gives for stem-rooting species, it will reward you after its fashion.

Washington, D. C.

*Prunus yedoensis* Mats. Yoshino. (See page 47.)

Early in the spring, about the time when forsythias are at their best, the shores of the Tidal Basin in Washington become a veritable fairyland with huge billowy masses of pale pink. This delightful effect is produced by more than eight hundred trees of the Japanese cherry known as Yoshino, and the popular success of this spectacle is reflected in the ever-increasing throngs of visitors who come each year to this section of Potomac Park. In its original home the Yoshino is so revered by the Japanese that they have planted more than fifty thousand trees in and near Tokyo, and with their characteristic love of flowers they have made its blooming the occasion for annual spring festivals. The oldest known trees were planted over fifty

years ago in the Imperial Botanic Garden in Koishikawa Park, Tokyo.

Planted in 1912 as part of the cherry collection presented by the Mayor of Tokyo to the City of Washington, the Tidal Basin trees are now 20 to 30 feet high, vigorous and in excellent condition. In habit the Yoshino is wide-spreading with a broad crown eventually 50 to 60 feet through, and the maximum height is around 45 feet. The bark is smooth and pale gray, becoming dark and a little rough on old trunks, and the leaves, especially when young, are hairy on the under side of the veins and on the petioles. Early in the spring, late March or early April in Washington, the leafless trees suddenly clothe themselves with myriads of very light pink, slightly fragrant flowers, an inch or more across, borne in clusters of two to five. For nearly a week, if weather conditions be favorable, the trees are objects of great beauty. Located as they are close to the water's edge, countless reflections add to the beauty of the scene.

Where conditions of weather and insect pollination are propitious, the Yoshino sets an abundant crop of small, round, shining-black fruits, thus affording an easy means of propagation. If other single, early-flowering cherries are near by, influence of foreign pollen may result in seedlings showing mixed parentage, but otherwise this variety comes true to type from seed, due allowance being made for slight variations in color and size of flowers. In the absence of seed, budding or grafting is satisfactory, using as stock Japanese cherry seedlings or mazzard. For some reason not yet determined, the Tidal Basin cherries have never set many fruits. This may be due to lack of insects to insure pollination, unfavorable weather conditions in that particular location, or some physiological disturbance.

Already a few of the eastern nurseries and also one or two on the Pacific Coast are offering the Yo-





Copyright, E. L. Crandall

[See page 46]

*Yoshino Cherries in Potomac Park, Washington, D. C.*



shino, and there appears to be no reason why it should not become increasingly popular where conditions are favorable. Cultural requirements are substantially the same as for fruiting cherries, and in general the Yoshino should thrive wherever peaches are successfully grown.

While the normal habit of this variety, as stated above, is wide-spreading, there is likewise a decidedly pendulous form, the Shidare-yoshino (*Prunus yedoensis perpendens* Wilson) which appears to differ from the type only in habit. While one or two nurseries already offer it, this pendulous form has been introduced into cultivation only recently, and it can not be promised definitely that it will equal the type in abundance of flowers.

Although the Yoshino appears to come true from seed, as mentioned earlier, some authorities believe it to be a hybrid, with *Prunus subhirtella* Miz. and *P. serrulata* Lindl. as the parents. It is true that no unquestionably wild plants have ever been found, and one English amateur claims that seedlings raised by him show unmistakable evidence of their hybrid origin.

The effectiveness of the Yoshino as a landscape factor depends to a large extent on its setting. Even when planted near water it is very desirable to provide a background of evergreens, and such a background is also strongly recommended when groups are planted in parks, or when the trees are used to line a broad avenue. If planted closer than thirty to forty feet there is a tendency to assume a stiffly upright habit, and even to produce fewer flowers. Where groups of trees are old enough to have developed crowns which slightly overlap it is a rare pleasure to walk beneath them on a bright sunshiny morning with the light filtering down through the canopy of pink flowers.

PAUL RUSSELL.

Washington, D. C.

#### PRIZE WINNING DAHLIAS

One form of the sport of growing dahlias is competition in shows. To exhibit successfully, if one has a small garden, the list of varieties must be severely cut, so that enough plants of each variety can be grown to have sufficient good flowers at the show date to fill the demands of the classification. Other things being equal, a vase or basket of all one variety will stand a better chance than a mixture.

It is difficult to get enough perfect flowers of the right stage of development and near the same size, without a larger number to choose from, but this careful selection is important where competition is close.

One of the most important factors is to grow varieties that are good winners. Good varieties can be grown poorly, but varieties with poor stems, center or form can not compete successfully with the better modern kinds. We can grow large varieties small, but no amount of skill can bring the old small flowered type up to present-day size.

Now that this year's shows are over, we may make up a list of the varieties that have been consistent prize takers. The following short list is arranged in approximate order of excellence and frequency of gaining awards:

Jane Cowl, gold and bronze decorative.

Ambassador, pink and gold large cactus.

Edna Ferber, coral and gold hybrid cactus.

Jersey's Beauty, spinal pink decorative.

Jersey's Beacon, Chinese scarlet, cream reverse decorative.

Fort Monmouth, wine to maroon hybrid cactus.

Mrs. I. de Ver Warner, light purple decorative.

Wachung Sunrise, gold and pink decorative.

Elite Glory, dark red decorative.

Kemp's Violet Wonder, violet decorative.



Two new very promising large ones just coming in are:

Kathleen Norris, pink decorative.  
The World, maroon decorative.

No very reliable white stands out yet above others. Perhaps the new Chemar's Eureka will be the much looked for. It is described as a white Jersey's Beauty. An orange sport of Jersey's Beauty has appeared and there is also an orange seedling of Jersey's Beauty with promise.

Of small flowered classes, Jean Kerr, white, of which an "improved" form is offered, and Kind's Gold Medal, rich scarlet edges shading into yellow, are conspicuous in the show and hybrid show classes. Little Jewel, pink small decorative, is supreme among the miniatures. Belle of Springfield is hard to beat as the smallest pompon. Newport Wonder, by beauty of form and color wins in the singles if the little inner curls are plucked.

J. B. S. NORTON.

Riverdale, Md.

*Oenothera caespitosa* Nutt. (See page 17.)

To the casual observer, this plant, when not in blossom, could very easily pass for a thrifty dandelion, but oh! what a difference when adorned with the great satiny blossoms, four to five inches across that look snowy white as they unfurl at dusk. The opening of the blossoms brings one of the ecstasies to be had from owning these plants and at my home brings an exciting time as soon as some one calls out, "The primroses are open." Then all scurry to watch the sepals snap back and the released petals unfold in a wonderfully short time. Up to noon the following day they remain white, then a pinkish tinge is noticed that deepens as the day advances, so that by midafternoon they have changed to a bright lavender. If the day is warm the petals close toward evening, but if cool and somewhat cloudy the flowers

will last a second day. As most persons see them in the wild in the afternoon, many think the plants have only lavender colored blossoms. The plants bloom from early June until mid-August and a single good clump will give many flowers. They are easily grown in cultivation.

FANNIE MAHOOD HEATH.

Grand Forks, N. D.

#### SEEDS OF SABATIA

In answer to inquiries received as to a source of supply of seed of *Sabatia angularis*, which was mentioned on page 168 in our October number, it may be stated that seed of this and of many other native plants can be obtained from the Wild Flower Preservation Society, 3740 Oliver St., Washington, D. C. The price of most species is 10 cents per packet.

#### PLANT WANTS

Readers are cordially invited to send in to the editor lists of their plant wants which will be printed together with their addresses so that other readers may communicate directly. Do not hesitate to make use of this column.

MRS. CHARLES H. STOUT.

Charlecote, Short Hills, N. J.

*Cytisus beanii*  
    *ardoinii*  
    *kewensis*  
    *humifusa*  
*Galanthus byzantinus*  
*Pentstemon heterophyllus*  
*Berberis vernae* (with pink berries)  
*Mertensia paniculata*  
    *alpina*  
*Begonia evansiana*  
*Belemcanda chinensis*  
*Erigeron pinnatisectus*  
*Potentilla fruticosa mandschurica*  
*Geranium farreri*  
*Rhododendron praecox*  
    *moupinense*  
    *mongolicum*  
*Hedera* with fringed leaves.





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## Looking Ahead

Among the points that might be called to the reader's special attention at the beginning of the year 1930 is the continuation of the various series of plant notes and pictures that were commenced in October, 1928, with the illustrations of *Iris hexagona* and *Iris filifolia*. Since that time the iris has been shown in various examples including *tectorum*, *spuria*, *forrestii*, *bulleyana*, *wilsoni*, *chrysographes* and *reticulata*. Narcissus have been represented by Croesus, The Fawn, Irish Pearl, Tapin, White Conqueror and Medusa, a series illustrated, as far as can be determined, for the first time in this country. The lily series includes *umbellatum*, *sargentiae*, *speciosum* and *centifolium*, the last probably the first illustration in the country. The cotoneasters, increasing in importance in many parts of the country, are represented by *horizontalis*, *divaricata*, *dielsiana* and *hebephylla*. A new

series of *Rhododendrons* started in October with *nudiflorum*, although other species had been shown in July, 1928. This series is to become a regular feature in 1930, and all of the series preceding are to be continued.

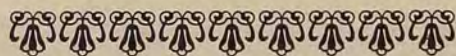
In July, 1929, Dr. Wherry contributed the first of his series, "Neglected Natives," and will continue this unique contribution addressed particularly to the gardening public. Mrs. Fannie Mahood Heath has promised notes on native materials from the northern Great Plains such as illustrate her present article.

Although these are points that are apparent in themselves, they are emphasized here because many readers may not realize that by this serial presentation we are able to bring them illustrative material that will make their files of the magazine of encyclopedic value.



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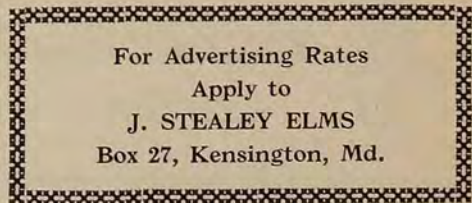
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The Society publishes The National Horticultural Magazine, a quarterly journal issued in January, April, July and October to all its members. It publishes special bulletins from time to time as material warrants special issues.

Former bulletins of the Society may be secured from the secretary as long as copies are available. Back numbers of the magazine are also available in limited quantities.

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*Checks should be made payable to The American Horticultural Society and sent to D. Victor Lumsden, Secretary, 1629 Columbia Road, Washington, D. C.*



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