

RURAL AND SUBURBAN

HOME-MADE TOOLS FOR THE AMATEUR GARDENER

One of the difficulties which confronts the amateur gardener in the laying out and working of the garden arises from the lack of proper or convenient tools. It is not always possible to have all one would wish in this line, especially if one has but a limited amount to spend on the garden and wishes to apply a large portion of this to the purchase of plants, seeds and bulbs; it, therefore, becomes necessary to economize, as far as possible, in the purchase of other accessories. There are, however, few tools beyond the spade, rake and trowel and a good reliable wheelbarrow but what can be evolved by one's own ingenuity and skill from the material already at hand on the place.

One of the first things which will be needed in the planting of the garden will be the garden line and reel; this may be substituted for by a ten-cent ball of wool twine and a couple of pointed stakes a couple of feet long, but for work not involving too many feet the pole and

decay, but properly cared for will last for years, it will be found much easier to do it while the barrel is sound and good than after the bottom is on the point of falling out. Use a mixture of three parts sharp sand to one of cement, mix with water, using it quite stiff, and place about an inch in the bottom of the barrel, tamping it down until the water rises to the surface; when set, but before it becomes dry, give a second coat of clear cement, bringing it well up around the sides and about the spigot, if a wooden one is used, but not about an iron one.

In using the barrel place clean straw in the bottom—enough to come up above the spigot—and fill with manure to the top and then with water. The barrel should be placed in a convenient place and on a support high enough to set a watering-pot under the spigot. The bottom of the barrel should not rest directly on the box or whatever is used to support it, but have three or four tile inserted under the rim of the bottom; this allows the air to circulate under and prevents the decay and if the manure barrel is kept in order from year to year it is ready for use in the spring, and there is that much less to do and provide, and the cost of a barrel saved will buy a new rose or other desired plant.

A handy tool in the garden is a carrier for plants which are to be moved from work-bench to house or garden, or from hotbed to garden.

WHAT ENGLAND CAN TEACH US ABOUT ROCK GARDENING

The largest rock garden in England is that of Sir Frank Crisp, at Friar Park, Henley. It is a faithful reproduction of the Matterhorn on a scale of about three acres. Seven thousand tons of limestone were brought from Yorkshire to make it. The snow-capped peak is represented by quartz. Below it are thousands upon thousands of alpine flowers growing in pockets between the rocks and filling every chink in the trials that ascend the mountain. There must be two hundred different species in bloom at once. At the base of the mountain is a miniature Swiss chalet, where one may sit and enjoy the scene, comparing all the main features with a little bronze model of the Matterhorn which Sir Frank had made for the entertainment of his guests. A brook courses down the mountain side and just before it reaches the chalet it forms a pretty cascade and then spreads out at your feet into a miniature lake decorated with pygmy water lilies and richly margined with pinks, primroses, gentians, and other alpine flowers. Five pictures from this garden are here given.

As to the Matterhorn feature, English critics are divided. They do not quarrel with the Japanese for imitating Fuji, but there is no precedent in England for duplicating any particular mountain. However, all are agreed that Sir Frank's alpine flowers are grown with admirable skill and arranged with perfect taste, and the accompanying photographs well illustrate the style of rock gardening. One sees everywhere in England, viz., the culture of alpine flowers in the pockets of a "rockery," which is a complicated structure, put together in such a way as to give many kinds of rock soil, and exposure. What England can teach us about this style of gardening I have tried to elaborate in the Garden Magazine for August. It is a grander theme to which I now invite your attention. For the best rockery in the world is obviously the work of man, while the finest floral pictures we can paint are those which seem to be the work of nature.

The kind of rock gardening that offers the most brilliant possibilities to owners of Canadian estates is the painting of great landscapes on land that is naturally rocky. If you have motored over the Downs amid ten-acre plots of scarlet made by the wild poppies in the grainfields; if you have coaxed through the Lake Country when miles of heather were in bloom; if you have rested your eyes during a hot summer noon on a cool expanse of ferns clothing a beetling cliff; if you have felt the centuries look down upon you from castle or cathedral ruins crowned with great colonies of snapdragon or red valerian; or if you have gazed upward at the harebells and rowan waving above a cascade in the Scotch Highlands, you will know what I mean.

Amidst such beauty my heart sank when I remembered the advertisements painted on conspicuous rocks in America. (How soon shall we have laws that make it a criminal offence to ruin a landscape in this way?) And I thought of the fortunes spent at Newport and in Connecticut in blasting out rocks and burying them in order to make lawns amid some of the wildest and most picturesque scenery on the Atlantic coast. There is nothing prettier than a lawn—in its proper place, and nothing more costly, vexatious, or futile than a lawn where nature does not want one. I believe we have spent millions in carting off rocks and carting on soil to attain a commonplace and conventional beauty, where thousands would have sufficed to restore and develop the inherent beauty of the region.

There are two kinds of pleasure anyone may have in making a house and garden. The easy and obvious pleasure is to incorporate all the ideas we like best, to choose a style we have admired elsewhere, to plant the flowers we love best. Such efforts produce gardens that do not fit their environment and gardens that lack distinctiveness and charm. The finer and surer pleasure comes from discovering the hidden laws and in giving them the fullest expression. No houses in the world fit their surroundings better than the stone farmhouses of the Lake District, because they are built of native stone in such a way as to resist the abnormally high rainfall of the region. No

garden in the world is lovelier than a bit of rocky land at Haverford, Pa., where the characteristic beauty of rock-loving plants is allowed the fullest expression.

I came home from England with a determination to find out what rock-loving plants are native to America, and what sort of pictures we can make with them. The first encouragement I got was from the catalogues of specialists who collect native plants. These men offer about fifty species of rock-loving flowers at prices ranging from \$8 to \$30 per 1,000, or at the rate of one to three cents a plant. Doubtless the plants are not as good as nursery-grown plants, because the roots have little or no earth about them. Doubtless they have to be handled more carefully until they become established. But the cheapness of them is astonishing, compared with nursery-grown plants. The saving may be anywhere from 100 to 500 per cent.

Suppose, now, you have a bit of rocky woodland that contains few wildflowers because picknickers have taken them, or cattle have been allowed there. For \$15 you could have 1,000 plants of dog's tooth violets or Dutchman's breeches, or mandrakes, or wood sorrel, or the dainty little alum root. For \$20 you could have 1,000 plants of hepatica or maidenhair fern or false Solomon's seal, or Thalictrum Cornuti, or the violet wood sorrel. For \$30 you could have 1,000 clumps of spring beauty, or 1,000 trilliums. Even if the plants were fairly common in your neighborhood it would be impossible, in some cases, for you to collect the plants as cheaply as this.

Or, if you have the rocks exposed to full sunshine there is still a good choice, even in a climate that is hot and dry in summer. For \$3 you could have 200 hardy cacti. (No one would want 1,000 cacti, because they are too suggestive of the desert.) There are several stonecrops or sedums which will grow in a pinch of soil on rocks that are so hot you can hardly touch your hands to them. For \$10 you can have 1,000 Sedum album. For \$20 you can have 1,000 Sedum ternatum, or bloodroot, or moss pink, or bird's foot violet. For \$25 you can have 1,000 scarlet columbine, wild blue phlox, pine barren sandwort, or even American bluebells (Mertensia Virginia). For three or four cents each you can get the dwarf early flags (Iris cristata and verna), bluetts, and the thyme-leaved speedwell.

This method, I believe, solves the hardest problem of all, viz., that of expense. Few people will not pay as much to develop rocks, woods, and other wild places as for the immediate environment of the house. That is right, too. But the great trouble with American estates is that owners rarely see the necessity of having a comprehensive plan for the development of the whole place. They prefer to start with one or two details. They build a fine house and garden, and when the bill for the latter comes in they exclaim "Heavens! if it costs this much to treat one little piece of ground what would it cost to develop the whole estate?" So they neglect the wild places, which may fill up with brambles, burs, poison ivy, or other uncomfortable and ugly features.

A thousand plants may seem a great quantity to order but 250 is not, and 250 can usually be had at the rate per 1,000, which is a saving of about 17 per cent over the rate per 100. We must have some unit and some very interesting points come out when you study what is actually available by the thousand. I do not approve of any style of wild gardening in

very rich. The finest are partridge berry and wintergreen, because these have red berries that last all winter. Think of getting 1,000 plants of partridge berry for only \$15! I know one collector who sends them in regular sods, two or three feet square, each sod counting as perhaps a dozen plants. Galax leaves are also a joy in winter, being green in the shade and bronze in the sun. A thousand galax cost \$40 or less. Prince's pine costs about \$20; Labrador tea only \$10. I wish some one would try Hypericum Buckleyi, which is said to be a fine ground cover in shade, and has yellow flowers in summer. It is quite proper to use foreign flowers in wild gardening provided they look like wild flowers and multiply with little or no care after becoming established. But it is not appropriate to use flowers that have been greatly improved by man, such as large pansies, or anything that suggests ceaseless care and expense. For instance, wall-flowers and snapdragons are perennial in England, but here they cannot be relied upon to last over the winter. Therefore they belong in the garden, not the wild garden. The expense of raising flowers every year from seed is not appropriate to wild or rocky land, even if a person can afford it. But annuals that "self-sow" are welcome.

The six most popular rock plants in England, as nearly as I can judge, are primroses, pinks, saxifrages, purple rock cress (Aubrietia) and the rock roses (Cistus and Helianthemum). Broadly speaking, I believe we can never rely on these for large effects, except in the case of pinks. I am rather glad that most of these flowers will not flourish permanently in America, except on a first-class rockery, for no country ought to imitate the landscape effects of a radically different climate. From the list of wild flowers given above I hope we can develop an American style of rock gardening. That style, I believe, must grow out of the following facts: Our summer is hot and dry; summer is our national vacation time; we flock to the mountains and seashore, where rocky land is often prominent; and finally labor is costlier here than in Europe.

But the cheapest and most permanent way to beautify rocky land is not to plant flowers at all. Instead, we should plant trees, shrubs, and vines. These will hold the soil, add to it, give grateful shade and cool greenery, and last a lifetime. A thousand pitch pine seedlings can be collected for only \$12. The most fitting vines for decorating or obscuring rocks are Virginia creeper, bittersweet, and wild clematis. Among the most precious bushes for rocky land are bayberry, sweetfern, and fragrant sumach, all of which have deliciously scented foliage, so refreshing on a hot day. I need not enumerate a great list for we have an infallible principle to guide us. Find out every kind of tree and bush that grows wild on your rocky land and in the neighborhood. Multiply these in every way, and make them the bulk of the planting. Gather seeds and make a little nursery of your own. Put soil into every bare pocket. Plant trees wherever there is soil enough to justify the effort. Do not as the people of Nahant, who, amid the rugged scenery on the Atlantic coast make lawns and plant cannas, but do as the Misses Loring have done at Pride's Crossing, Mass. Develop the native wildness of the place until it has the richest and most romantic beauty.

And to give the crowning touch to picturesque rock scenery we must use certain little plants like Kenilworth ivy, wall pepper, and

to set forth, convinced that resting in itself, and that the beauty must be more or less those who believe only in the city will, no doubt, shake this; but many times in civic history has proved more at formal. It has been demonstrated here, in New York, erected the new city, as need have builded better than they have given us not the classic, but a later and perhaps a more development. collaboration than that arranged it would be hard to conceive. Dyke knows the city backwards up and down, from Harlem to and from the North River to the his pages are like the informal ensely clever and amusing man to the things every visitor and every resident want to know, gaining, witty. As for Mr. Pennell they are beyond praise as an in-the life and the architecture of are no less than 124 of these of them being beautifully re-pro by a process that brings out the estics of Mr. Pennell's art. In outward appearance, the vol- of its authors, with its hands- and its beautiful red and gold by Mr. Pennell himself. Alto- volume to last, not merely for a ng as there are devotees of the opolis.

GOLDEN TREASURY

ing into one the two volumes of reasury of Songs and Lyrics, the mpany has done a real service to ish poetry. Since the appear- st series in 1864, Professor Pal- ion has been the recognized stan- isputed and so universal, indeed, ty been that the very title Gold- as been used for a series of Eng- whose appearance is familiar to

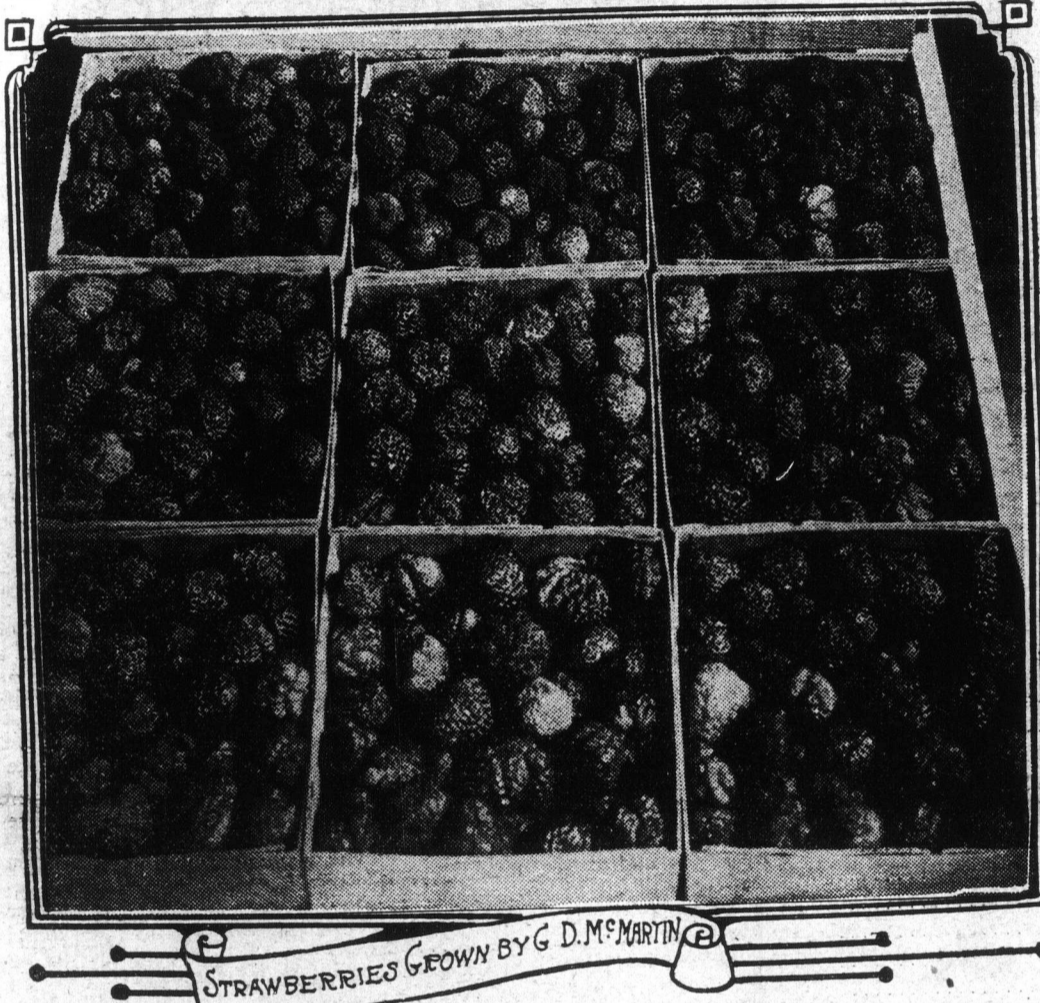
as of his work induced Professor arry on his task, and in 1897 a was published. The first volume poems written before 1850; the edition of which was published fined to the poetry of the second nineteenth century. But the two one book, a real treasury of lyric division into two series is the re- years consumed by Professor the arduous task of selection; ere is no reason for it. In uniting lume still small enough to slip into the pocket, the Macmillan s made even more accessible, the o treasuries contain.

ance and contents the new book is the two of which it is composed. es still divided into four parts, om the poets who most give them tive character, the Books of Milton, Gray and Wordsworth, ries being undivided. It is thus eord of the best of English lyrical the day when it ceases to be too ead for pleasure, down to our ion. There have been many col- a similar aim. None has ever the wide sympathy, the keen, un- mination, and deep scholarship the work of Professor Palgrave.

ROME AND AMERICA

ortant works on history published e are among the first of the sea- books. In The Roman Assem- . W. Botsford presents the fruits thorough study that has yet been subject whose importance in gov- litics and history can hardly be ed. The Roman popular assemblies sis of the Roman state. In treat- efore, Prof. Botsford is able to illuminiate the whole history of e second of the two new works is a y Prof. C. A. Beard of readings il- American government and poli- ted with great care and discrim- eadings cover a wide field. In the value of original sources has too apparent to need further dis- of. Beard's Readings is an excel- e of how skillfully the new school can use them.

000 actors were walking the streets k going from office to office, seek- ents in July. Each year the pro- ecoming more crowded than ever, ut the same number of companies on the road. Each year hundreds ve graduated from the schools of an equally large number join the without ever having gone through school. How many thousands of s manage to exist from the end of to the beginning of another, is a has given many statisticians of the derable thought. Even during the if the season there are thousands of of employment in New York. It a that the young man or young has cast anxious eyes on the stage ion would hesitate long before tak- it is to many a precarious mode of ir daily bread.



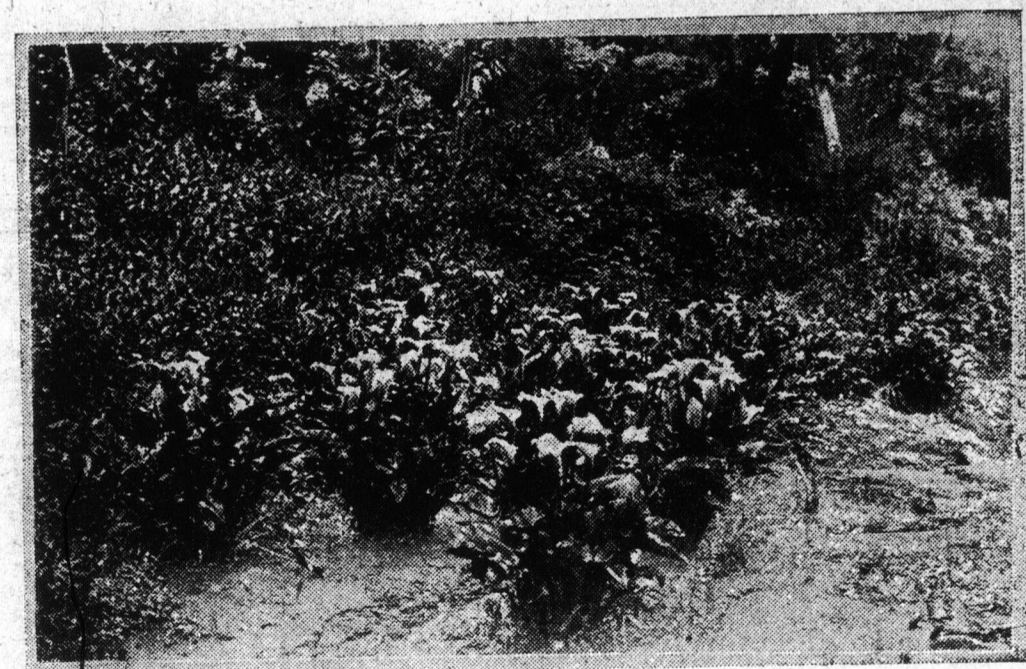
Here is a picture of second crop straw- berries. The variety is the Magoon. These berries were grown at Glen Elysium, near Cordova Bay, the property of G. D. McMartin, who has fourteen acres in fruit of various kinds. These berries are from plants a year old, and were picked on September 23. Many

of the plants are yet in blossom. To avoid misapprehension, it may be added that these berries were grown in the open air. Second crop strawberries are becoming common, and it is just possible that as the years pass the plants will adjust themselves to the local climate and second crop berries will become a regular feature of the market.

pegs will be found more practical; this is produced by taking a long strip of wood two or three inches in diameter and boring holes in it at a distance of a foot apart along the entire length. In the first hole at one end a stake two feet is fitted, the hole for this being large enough for the peg to work freely in its socket, the head of the peg being cut away enough to leave a shoulder for the pole to rest on and the extreme end having a nail driven through to prevent the pole slipping off. The remaining holes may be somewhat smaller, as the marking pegs do not need to be as large as the stakes at the head, and may be tapered somewhat at the end so that it may be driven in firmly, or it may have a shoulder and be secured in the same way as the head peg, but the tapered peg is the more simple.

In use the head peg is driven firmly into the ground where the centre of a round bed is to be made, the marking peg inserted in a hole which corresponds with the desired diameter of the bed—three feet if the bed is to be six feet in diameter—and the point held firmly on the ground as the end is carried around the circumference of the bed. Where the bed forms the centre of a circular garden the peg should be removed a distance of three feet or more, according to the width desired for the paths and these marked out in the same way. Nor is the marking out of round beds all which may be accomplished by this handy tool, as straight beds may also be marked by setting the stake at one corner and the marking peg at the other and marking off distances by the figures on the pole.

An oval bed presents more difficulties to the amateur than most any other form, but may be easily managed by the use of a line and two stakes. First find the length and diameter of the bed desired and drive two stakes in each side of the long way of the bed a distance from the edge according to what the bed is to be a broad or narrow oval. The farther the stakes are set from the edge the broader will be the oval. For instance, if a six-foot-long oval is desired, setting the stakes a foot from either end and using a cord eleven feet long will give an oval three and a half feet wide—a very pretty size. The cord is made long enough to go around these stakes and reach to the outside of the bed on one side only and tied securely, so that it can



Arum Lillies Growing in the Open

which the plants cost more than five cents each, even if a person can afford it. For the best wild gardening costs less than any other style of gardening. All the plants mentioned in this article are hardy, perennials, which ought to multiply with little or no care after becoming established, as the whole object of wild gardening is to produce large, permanent colonies such as glorified the woods, rocks, and meadows when the first white men came to this country. Even in the winter we can make some of the rocky land beautiful, at least when the ground is not covered with snow, by using evergreen ground covers, in which America is

New Zealand moss, which have a genius for filling every chink, especially under foot. For these plants give the effect of age, obscure freshly cut surfaces, round off sharp corners, and constantly excite wonder and delight by transforming a mere trowful of dust into a soft green cushion, pleasant and yielding to the foot. Haven't you a bit of rocky land that contains some dramatic feature? A spring, a brook, a dripping well? Why not develop a small piece along these lines? And why not have a comprehensive plan for all your rocky land?—Wilhelm Miller, in Country Life in America.