

A RARE PLANT.—The *London Garden* describes the *Godwinia gigas*, lately in full flower for the first time in that country. It is an aroid, with a very large leaf and flower. The flower, or more properly, spathe, was nearly 2 feet long and a foot and a half in circumference, on a stem only 18 inches high. It came from Nicaragua, where it is stated the petiole is often 10 feet long.

FUCHSIAS, FROM SEED.—According to the *Rural New Yorker*, may be easily propagated if the seed pods are allowed to remain on the plant until they fall off, laying them aside for a few days until they begin to decay, and then washing from the pulp. Sow in sifted leaf-mould and sand, and eighth of an inch deep, water, and as the plant become larger, change to larger pots. The seedlings usually vary widely from the original.

THE "SMILAX."—Peter Henderson says that this plant (which is the *Mysophyllum asparagoides*, belonging to the natural order *Smilacaceae*) has become so extensively cultivated within a few years, that green-houses devoted to it in New York and Boston cover a surface of 20,000 feet, and that large numbers besides are grown as window plants. We may add that its resemblance to the myrtle (whence its name) gives it its popularity, and it is well adapted to house culture, flourishing at a temperature of 50° to 75°, and doing well in shade.

THE FRUIT GARDEN.

M. B. Bateham, Secretary of the Ohio Horticultural Society, and residing near the shore of Lake Erie, where the climate is very similar to that of Southern Ontario near the same Lake, gives the following account of the newer varieties of raspberries.

Hershim—thus far hardy and productive, and a strong grower. Not yet sufficiently tested.

Clarke—hardest of Antwerps; rampant grower, and must be cut back in summer. Productive—fruit large and high-flavored.

Purnell—not quite so hardy as the *Clarke* needs a slight protection or shelter.

Belle de Fontenay—yielded, last summer, berries to the end of October.

Philadelphia—most productive on rich soil, berries rather soft, and not high flavored, and its dull color a great defect. It suffered for the first time from the severe winter last year.

Blackcaps.—Doolittle for early, followed by Mammoth Cluster, are the best. Davison's Thornless is not so productive as Doolittle, and is scarcely earlier. Mammoth Cluster would be queen of Blackcaps, if it were not rather soft to ship long distances. The common Miami ships better.

Chapman is a new Blackcap of high promise, and may be identical with Kentucky Mammoth.

Kirtland has succeeded well in nearly all part. of the State, but cannot be shipped to distant markets; the same with the *Clarke*.

Mr. Bateham furnishes the *Rural New-Yorker* the following actual measurements of the crops on a single bush of several varieties:

	1871.	1872.
Naomi.....	1½ quarts.	1½ quarts.
Fraconia.....	1 " "	1 " "
Belle de Fontenay.....	1 " "	1 " "
Clarke.....	1 " "	1 " "
Purnell.....	1 " "	1 " "
Philadelphia.....	1 " "	1 " "
Surprise d'Automne.....	1½ " "	1½ " "

THE FLOWER GARDEN.

CHLORIS RADIATA.—A singularly elegant perennial grass is *chloris radiata*. When blooming the stalks rise to a height of from 10 to 12 inches, having flower scapes up in a slender stem, radiating horizontally from the extremities of each scape, like the concentric spokes of a wheel. This plant is a native of East Indies, though termed a perennial, this grass can only be treated successfully in this country by being sown annually in spring, with such after treatment as half-hardy annuals require. — *The Farmer*.

Dr. Jeannel, a French horticulturist, highly recommends the following:—Nitrate of ammonia, 400 parts; bi-phosphate of ammonia, 200; nitrate of potassa, 250; chloride of ammonium, 50; sulphate of lime, 60; sulphate of iron, 40. These ingredients are pulverized, well mixed, and kept in well closed dry bottles. Sixty-five grains of this mixture are dissolved in one quart of water, and to each plant (in pots or in open ground) is given weekly a dose of from 400 to 1,200 grains. It is best to pour the liquid in the saucers in which the pot is placed.

PERFECT ROSES.—Peter Henderson, (in the *Agriculturist*), in allusion to the fact that all the good qualities of fragrance, beauty, hardiness, and constant blooming, are not to be found in one rose, quotes the words of a German neighbor, who came to him in great irritation, and said, "I have so much trouble with do ladies when dey comes to buy mine rose; dey wants him hardy, dey wants him doubles, dey wants him morlly, dey wants him fragrant, dey wants him nice gowler, dey wants him eberydings in one rose. I have sometimes say to dat ladies: Madam, I never often sees dat ladies dat was beautiful, dat was rich, dat was good tember, dat was youngest, dat was clever, dat was perfection, in one ladies. I sees her much not!"

Arranging Flowers for Bouquets.

It is an art, requiring no small degree of taste and skill to arrange cut flowers so as to form an attractive bouquet for the vase or basket. It is something, too, which comes to one intuitively, and it can hardly be described in words. However, it may be said in general that the more loosely and unconfused flowers are arranged, the better. Crowding is especially to be avoided, and to accomplish this, a good base of green of different varieties is needed to keep the flowers apart. This filling up is a very important part in bouquet making, and the neglect of it is the greatest stumbling-block to the uninitiated. Spikes and drooping flowers, with branches and sprays of delicate green, are of absolute necessity in giving grace and beauty to a vase bouquet. Flowers of similar size, form and color ought never to be placed together. Small flowers should never be massed together. Large flowers, with green leaves or branches, may be used to advantage alone, but a judicious contrast of forms is most effective.

Avoid anything like formality or stiffness. A bright tendril or spray of vine can be used with good effect, if allowed to wander over and around the vase as it will. Certain flowers assort well only in families, and are injured by mixing. Of these are balsams, holly-hocks, sweet peas, etc. The former produce a very pretty effect if placed upon a shallow oval dish upon the centre table. No ornament is so appropriate for the dinner table or mantle as a vase of flowers, and if you expect visitors, by all means cut the finest bouquet your garden will produce, and place it in the room they are to occupy. It will tell of your regard and affectionate thoughtfulness in a more forcible and appropriate manner than you could find words to express. If a small quantity of spirits of camphor is placed in the water contained in the vase, the color and freshness of the flowers will remain for a much longer period. Thus prepared, we have had flowers to keep a week, and at the end look quite fresh and bright. — *The Maine Farmer*.

Window Flower Boxes.

Given fresh mosses, and leaves, a few trailing creepers and a spike or two of flowers, and the effect must be charming, whether framed in enamel or zinc, in ebony or deal. And for those who are ambitious only of effect, there are a dozen cheap and feasible methods of securing it. The box may be of tin, painted or of common white pine, stained and oiled, with a strip of moulding, or a few hickens and fir cones tacked on by way of ornament. Or, prettier still, it may be turned into a rustic affair by covering it with narrow horizontal lengths of rough-barked wood or virgin cork. Birch boughs or laurel, or both alternating, will answer, halved lengthwise with the saw, and cut into sections to fit the box, the shelf which supports it being edged with the same.

Or a gayly-colored affair may be made with narrow strips of oil-cloth, finished off with wooden moulding at top and bottom, a set pattern being chosen of bright solid colors, like the tiles which are so much in vogue for more expensive arrangements. In either case, unless the window-still is of unusual width, a strong wooden shelf must be adjusted in the recess to support the box and the edge which fronts the room must be ornamented to match.

The one essential of window gardening is sunshine. That secured, the rest is easy. A south window with a shade which can be raised or lowered at pleasure is best. The box provided and the shelf set, begin operations by a bottom layer of broken char-

coal. It is well to have the larger plants in pots, both for convenience of removal and to obviate the need of box drainage, which is a troublesome thing in a parlor. Set the pots on the top of the charcoal, arranging according to fancy, but keep the taller plants in the middle.

Free hardy bloomers, such as fuchsias, some roses, and geraniums—scarlet, rose and white—carnations, Chinese primroses, do better in the house, as a general thing, than tropical ferns and begonias which are so temptingly beautiful in conservatories and perish so quickly out of them. One or two foliage plants will also be pretty, and two or three German and English ivies. Fill in around the pots with light friable soil, one-fifth sand, and smooth the top over so as to cover the pots. Into the interstices you may tuck smaller plants—*inignonette*, *lobelia*, *cerastium*, sweet alyseum, *jonquil* bulbs, ivy, *peranium*, moneywort. There should be an *America* creeper to arch the window.

Last of all cover the surface with mosses fresh from the woods, amid the roots of which will be tangled all sorts of sweet wild things. Water well, and sprinkle the surface every day with a fine rose or whisk broom. Later in the season, as some plant grows yellow or dull, you can lift it out and carefully insert a new one—a tall spiked heath, or a baby cactus; and the sudden brightening of the whole, by virtue of the addition, will startle you into fresh pleasure, like the lovely surprises of the spring. The water used for the plants should be tempered slightly when the weather is very cold. — *Ex.*

Measuring the Height of Trees.

In his tale of "Monsieur Violet," Captain Marryatt tells us, as an instance of the great aptitude for applying simple rules possessed by the Shoshone Indians, that when they desire to measure the height of a tree at any time when its shadow was cast on the ground, they used to place a stick of a given length into the ground, and then calculating the difference between the length of its shadow and its actual height, and applying the same to the shadow of the tree, they ascertained its correct height, thus unknowingly working out a sum in the rule of three. Any person, however ill-informed, might easily get at the exact height of a tree when the sun shines, or during bright moonlight, by marking two lines on the ground three feet apart, and then placing in the ground on the line nearest to the sun a stick that shall stand exactly three feet out of the soil. When the ends of the shadow of the stick exactly touches the further line then also the shadow of the tree will be exactly in length the same measurement as its height. Of course in such a case the sun will be at an exact angle of 45°. Measurements of this character could be best effected in the summer, when the sun is powerful, has reached to a good height in the heavens, and when the trees are clothed with living green so as to cast a dense shadow. To many to whom this idea might not have occurred, it might be made annually a matter of interest, thus on warm summer days to take the height of prominent trees, and so to compare notes of growth from year to year.

Awful Prediction Concerning the Vintage in France.

A learned Theban named Louis Barrault has startled the French wine-growers by his prophecies respecting the failure of the vintage from the frost that may be expected in the approaching spring. He commences his prediction by saying:—"According to the observations made by me during the course of a long period, and the experience that has never deceived me for more than seventy years, this is what will happen in the spring of 1873. In the first place, the fructification of the vine will be exceedingly scanty and meagre. Secondly, the vines will be frozen in the spring, in the same manner that they were frozen last year, and even more extensively and generally. The summits of the hills and the vineyards, with an eastern and southern aspect, will form a partial exception, and suffer only in the lower half, whilst those looking to the north and west will be most injured by the frost, the result being a very short crop of mediocre quality. Last year I predicted that the vines would suffer everywhere, on the heights as well as in the valleys, and on the level ground of the plains. My prediction has been amply verified; for they were frozen in whole districts in the month of March, because February had been mild, and caused the sap to rise prematurely, so that they could not escape injury from the spring frosts when they began to shoot, especially in the low-lying vineyards. Therefore I advise the proprietors of vineyards to take such timely measures for their protection as they may have at their command."