

The Germans call the pansy "stepmother." Turn the flower over and you will see that there are five flags, the petals, and five seats or chairs, the sepals. The biggest flag, the mother, occupies two seats, the next two, her own daughters, each one seat, and the last two, her stepdaughters, nearly always clad in dark mourning, have to sit both together on one chair.

THE CYCLAMEN.

Numerous readers have asked about growing cyclamen from seed. The seed of cyclamen should be sown thinly in shallow pots or pans, covered with a piece of glass and placed on a shelf near the window in a moderately warm place. The glass should be removed as soon as the young plants appear. When they are large enough to handle, say when a third leaf appears, transplant into boxes, setting the plants an inch and a half apart. When well rooted, pot off into pots three inches in diameter. The proper soil is rich loam with an abundance of leaf mould and sharp sand. In potting, fully two-thirds of the bulb should remain above the soil so the leaves may start free and clear above the dirt. "Plunge" the plants in the Summer in a shady place where they may have two or three hours of sun a day and give an occasional syringing. This should be done every other day to head off the red spider. Repot and bring into the house from the middle to the last of September and keep in a cool, airy place. Now, in place of syringing, dip the top of the plants in water every other day. The principal point in the culture of the cyclamen seems to be to keep it constantly growing.

NOVELTIES.

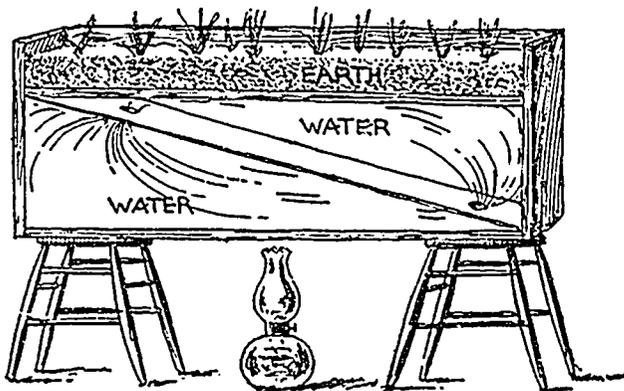
The dwarf Japanese maple is exciting much interest just now. It is an attractive little foliage plant for indoor or out. The foliage is beautiful, of various colors and differently formed leaves. The plants are strong and vigorous.

Another Japanese novelty, though not so thoroughly tested as the maple, is the Japanese dwarf flowering cherry. It is artificially dwarfed and grown in small pots, flowering in the house or conservatory. The flowers are very fragrant and last about two weeks after opening.

A valuable and comparatively new plant in this country is the *gynera aurantica*, in Europe called the velvet plant, its leaves having an artificial and velvety appearance. The leaves and stems are covered with shining purple hairs, which reflect many colors, a change of position seeming to alter the color of the foliage. It may be bedded out after the weather has become warm and settled.

A PROPAGATING APPARATUS.

To root cuttings successfully in quantities, it is necessary to



supply bottom heat, and this can only be done with a proper appliance. People who possess conservatories or greenhouses have no trouble in securing this condition, but thousands without them are perplexed. Any one can raise a few plants from cuttings in ordinary flower pots without difficulty. For larger quantities the system described in THE DELINEATOR for December will answer. Those who desire something on a little larger scale than that afforded by pots should have made a zinc box thirty inches long, fifteen inches high and eight inches deep. A false bottom is placed in the tank, slanting from the lower corner of

one end to the other end four inches from the top and soldered in around all four sides. At each end of this false bottom a hole an inch or two in diameter is made and tongues are fastened to the sides on which to rest boards about two inches from the top. The tank is then filled with water up to the tongues on which the boards rest, the boards are placed in position and covered with sand, a hole being left so that the tank can be supplied with water as needed. The tank is then placed on two chairs and a kerosene oil lamp is set beneath it. The heat from the lamp keeps up a continual circulation of water through the box, warming it evenly at all points. The best temperature in which to root the majority of greenhouse and bedding plants is sixty-five degrees, indicated by plunging a thermometer in the sand. The temperature of the atmosphere may be fifteen degrees less with plenty of air, though many florists deem it necessary to keep their propagating houses close.

ANSWERS TO CORRESPONDENTS.

Mrs. R. L.—The century plant, *agave Americana*, requires considerable water, that is, if you wish to encourage growth, though it will live with only an occasional watering. It may be kept growing in the house during Winter or stored almost anywhere safe from frost. It is not a cactus but an *amaryllis*.

Mrs. R. P. B.—See answer to W. F. H. If possible, make cuttings in pots as suggested in the December number, or in the propagating case described on this page.

Mrs. S. E. M.—Ferns require good drainage, plenty of water, frequent spraying and a cool, damp atmosphere. Usually ferns in house culture are kept too warm and dry. See answer to S. B. and also W. J. M. in February number. Repotting once a year in the Spring is sufficient for palms. *Pandanus* requires a warm temperature; it will not do well unless a temperature of seventy degrees or over is maintained, though it may be kept in a temperature as low as sixty degrees. Palms succeed best in sandy loam mixed with sharp sand. In Summer they require plenty of water, but in Winter they should be kept moderately dry with no water in the axils of the leaves. They are propagated by offsets, which should be carefully removed from the plant with a sharp knife. Keep the crown of each cutting well up when potting and cover with a bell-glass, giving little water until the roots are formed.

DELLE.—*Fleur-de-lis* is the iris, a native of northern temperate regions. There are about one hundred species.

C. R.—To destroy little white worms in the soil of pots, stick common brimstone matches into the soil, with their heads down. Do not use acid on your plants, as it will be most certain to destroy them. Floral fertilizers sold by seedsmen and florists are more convenient to use than liquid manure and give about the same result. Do not allow water to stand in the *jardinière* which holds the pot in which your palm is growing. Although not necessary, a little direct sunlight during the day will not injure your palm.

ELIZABETH.—Try the remedy on one plant and report the results.

I. B.—The leaves sent plainly indicate the work of aphids. For the remedy see the November number of this magazine. If your plants are growing "straggly," it is because they have not sufficient sunlight and, perhaps, too small pots or poor soil. If the plants were not repotted last Fall, repot now, cut back into proper shape and give plenty of light, air and water. If your plants grew vigorously last Summer, you cannot force them to continue growing, as they require a season of rest. Plants which you wish to thrive in the house next Winter should be kept in a shady position in the garden this Summer and watered as required.

Mrs. J. S.—After blooming and when the weather will permit, plant your Bermuda lily in the garden and allow it to remain there and secure a fresh strong bulb every Fall for pot culture. The black leaves on your *heliotrope* are caused by a fungus. Sprinkle dry flowers-of-sulphur over the leaves. This fungus is frequently caused by sudden or extreme variations of temperature or by drafts of cold air. An affected plant is almost worthless. Destroy the plant and start again with a young and healthy one. The white scale or slug on your roses can be destroyed by washing or thoroughly syringing the plants with kerosene oil emulsion as directed in the November number of THE DELINEATOR.

Mrs. F. F. F.—Christmas cactus requires the temperature of an ordinary living room, plenty of light and but little water until just at the time the buds begin to form, when it should have a liberal supply until through flowering. The reason your day lily does not bloom is because the soil around it is too poor. Dig in well-rotted cow manure around it and it will flower freely.

L. L. B.—Plant the Chinese lily in the open ground after it has flowered in water. Protect it with a covering of manure in Winter.

W. F. H.—The rubber plant is propagated by cuttings of the green shoots. The suckers may also be used but make inferior plants.

Mrs. L.—Syringing your plants with water will keep down the red spider. *Hydrangea paniculata* requires no especial treatment and does not need pruning, except to keep it in good shape. *Hydrangea hortensis* in Canada may be kept in the cellar over Winter, occasionally