during May, but this would be too long a season when smaller pots are used to finish them in. By easy stages we shall transfer our plants into the flowering pots by the middle of June. In the mean time the plants will need careful stopping to insure sturdy growth. To get low, well-balanced growth we must begin now to make a foundation. It is not a work which can be arranged by the week or month, but must be attended to daily. There will always be an abundance of leading shoots, and if these are allowed to get away it will be at the expense of the side shoots. A lateral growth is desired at all times, for it is far easier to train the shoots upward than outward.

We pot firmly, but do not pack the soil. Our experience has shown that the roots of large, healthy plants when confined, as they are in pots, increase the bulk so much that but little room is left for water, especially toward the end of the season. Sometimes the roots choke up the drainage, and last season we had to drill holes in the sides of several pots which had become waterlogged. We advise that three holes be made in pots intended for specimen Chrysanthemums; this can be made with a sharp-pointed chisel. In potting it is well to allow at least two inches for water. This makes it convenient to give a top-dressing to some of the less thrifty plants late in the season.

Our stock plants for specimen blooms are still in cold frames. They will soon furnish an abundance of cuttings. All early varieties, such as Madame Bergmann, Marion Henderson and Glory of the Pacific, may be taken during April. May will be early enough for midseason varieties, and June for close planting, where medium-sized blooms only are wanted.

For propagating we use a frame which can be kept closed during bright days, and well shaded. We air thoroughly during the night. Plenty of water is required for the first week or ten days, and the cuttings should not be allowed to wilt.

Wellesley, Mass. *T. D. Hatfield.*

## Carnation, Chabaud.

SUMMER-FLOWERING annual Carnations are of quite recent origin, and it is only about five years since the Marguerite strains were introduced and accepted with much caution by cultivators, for it did not seem possible that they could be brought into flower from seed in so short a time. There has not been any apparent improvement on the Marguerite strain since its introduction; on the contrary, there seems an even greater tendency to the production of single flowers than when first sent out. I have noticed that a large proportion fail to flower the first season, and it is evident that the strain has not been perpetuated with as much care as it deserves.

The Chabaud strain of annual-flowering Carnations was therefore a valuable addition. These seem to combine all the good features of the older Carnations, such as free flowering, diversity of color, fragrance equal to the indoor varieties, and good yellow varieties occur quite frequently. This is one of the few sterling novelties that cultivators are always seeking, but do not succeed in finding with all their purchases.

Annual-flowering Carnations should be sown early in the year if they can be sown under glass. Treated in this way the flowers will be most satisfactory, but it is by no means too late to sow now, as there will be rapid growth during the brighter and longer days. We made a sowing last December to see how large it was possible to have them and how early in the summer, but another sowing made now will lengthen the flowering period considerably in the late summer months, when flowers are scarce.

South Lancaster, Mass. *E. O. Orpet.*

## California Garden Notes.

**Antholyza Æthiopica.**—This is a showy bulbous plant common in gardens of southern California, and it blooms freely during the winter months. It belongs to the Iris family and produces a spike of flowers with foliage like that of Gladiolus. It is a native of south Africa, and is commonly known in gardens, I am told, by the name Watsonia, a nearly related genus. The spike of flowers is generally over four feet tall, with as many as thirty flowers on one of its two branches, the flowers of a dull brick color or Chinese red, the prominent anthers and markings in the divisions of the corolla of a deep maroon. The flower is more than two inches long and nearly an inch across.

**Scilla hyacinthoides.**—This Scilla, a native of southern Europe and Palestine, is rare in our gardens, but thrives well. Its spike of blue flowers is sent up to a height of about three feet from a mass of luxuriant foliage, and bears from 100 to 150 or more light lavender-colored flowers, each nearly three-quarters of an inch across. The long spike of flowers opens in succession, and thus remains in bloom for a long period of time.

**Leptosyne maritima.**—This is one of the showiest of the flowers that bloom with us in March. The luxuriant mass of succulent foliage is surmounted by a wealth of its rich yellow flowers, which measure fully four inches across and possess a delicacy of texture rare in a composite. Its flowers should be popular for cutting, but it still seems not to have found a place in many American catalogues. Its tuberous roots may be easily handled, or it may readily be grown from seed.

**Freesia refracta alba.**—This Freesia has been a disappointment to some of its eastern friends who have tried to grow it from seed, expecting it to blossom the first season, as some catalogues have claimed it will do. In my own experience the character of the soil seems to make all the difference in the results obtained. In some of our mesa soils it makes a better bulb and produces finer flowers in one season from seed than it will in several seasons in our rich valley soils, and only experience can determine its needs in this respect.

San Diego, Calif. *C. R. Orcutt.*

## American Shrubs for Ornamental Planting.

TWO weeks ago Garden and Forest published an article entitled "American Trees for Ornamental Planting," which was a summary of part of a lecture delivered by Mr. B. M. Watson, of the Bussey Institute, before the Lenox Horticultural Society. I now send a condensation of what Mr. Watson said of certain native shrubs, repeating what was stated in relation to the trees that this does not pretend to include all the American shrubs which are worth planting. Nor must it be inferred that imported shrubs should be excluded from American gardens, for many of them are very desirable. The aim was to call attention to several of our neglected shrubs, with a brief statement of some of their leading characteristics.

Azalea still remains the popular name for the deciduous section of the Rhododendrons. The hardy kinds most generally planted are known as the Ghent Azaleas, which are hybrids of our native Rhododendron (Azalea) calendulaceum, a plant of the southern Alleghanies, rather larger than its hybrids and quite as well worth growing for its brilliant flame-colored flowers. When propagated from seed its flowers show a variety of colors. It needs a rich soil and a deep one, with water in summer and some protection in winter until it is established, and then it is perfectly hardy. Our Pinxter-flower, R. nudiflorum, is rarely planted, but it is well worthy a place in the shrubbery, for its bright pink flowers, which also vary, widely among many seedlings, are most attractive in the early seasons. R. arborescens, also from the southern Alleghanies, has white fragrant flowers slightly tinged with rose, and brilliant scarlet stamens, which appear in early summer. R. Vaseyi is a comparatively new plant, but it is rapidly gaining favor, and it is probably the best of all our native Azaleas because it flowers so early and is less liable to be cut back in the winter. In growth it is regular and bears an abundance of beautiful pink flowers before the leaves expand. This ought to be a capital subject for the hybridizers. All these plants are now to be procured in abundance at reasonable prices since they can be collected easily in the Carolina mountains. R. viscosum flowers in July; that is later than the other species. It is our common Swamp Azalea with white flowers and exquisite fragrance. It naturally grows in wet land, but when lifted from the woods it succeeds admirably in the garden.

Baccharis halimifolia sometimes assumes the form of a small tree, and it is one of the few shrubby plants which belong to the great composite family. It is naturally a beach plant, but it grows well anywhere, and is most interesting on account of its good foliage and its numerous cottony fruits in late autumn. Mr. Olmsted has used it largely in planting the Back Bay fens in Boston, where it is sometimes badly cut back in winter, but the annual growth is rapid and sufficient; indeed, close pruning seems to give the best development of its foliage and fruit. Cephalanthus occidentalis, the Button-bush, is especially desirable because it blooms late in the summer. Usually found in moist places, it is always thrifty in or near the water, but it grows also in well-drained soils. Clethra alnifolia, the Sweet Pepper-bush, is another late-flowering shrub and a charming one, bearing an abundance of snow-white flowers in spikes. It will grow anywhere, even in shade or in poor soil, and is an excellent undershrub. The southern species, C. acuminata, makes a pleasing variety.