

subjects have had their day and can be removed. For winter and early-spring flowering, stocks should be given a warm, sheltered, well-drained situation. In Britain, where winters are more severe, stocks are frequently grown on in pots and flowered in a greenhouse during winter.

None of the species mentioned requires artificial heat to assist the seed to germinate. Despite what has been said to the contrary, all of them may be raised successfully in open ground if reasonable care is taken with watering and shading. However, frequently it is more convenient and results are better if they are raised, in the initial stages at least, in seed trays in a cold frame where they can receive more regular attention.

old practice, but still a good one, was to plant the begonias underneath standard fuchsias, which gave protection from both wind and sun.

Such annuals as *Phlox drummondii* and verbenas will be making rapid growth, and for best results from them the long growths should be pegged down to the surface of the soil. This not only prevents them from becoming leggy or spindly and likely to be damaged by wind and storm, but induces them to develop more lateral growths, thus prolonging the flowering period. Pegs can be made of thin galvanised wire.

Plants under Glass

At this time of year glasshouses require some form of shading to keep down the day temperature and to give

some protection from the burning rays of the sun. Frequent syringing with water is necessary to moisten the atmosphere and to assist in combating attacks of thrips and red spiders, both of which seem to revel in a dry atmosphere. Plants attacked by these pests soon become disfigured and debilitated.

One of the most colourful of greenhouse flowering plants is the calceolaria. To provide plants that will flower during September, October, and November of next year seed should be sown now. Calceolarias are not difficult to grow, but they must not be neglected at any period of their growth. From the time of sowing the seed up to and including the flowering period they must be given an even temperature and careful attention to maintain them in a flourishing condition.

To prepare for the sowing of the seed a pot or pan should be filled with a moderately-rich and porous compost, made firm but not hard, and the surface finished off perfectly even and level. Over the surface a little sharp sand is sprinkled and the seed—which is very fine—sown and covered with the merest dusting of fine compost; before the seed is sown it is a good plan to steep the pot containing the compost in water until moisture begins to show on the surface. The pot is then stood in a shady part of the glasshouse away from draughts and covered with a piece of glass to prevent rapid evaporation of moisture. The glass should be removed each day, all moisture wiped off, and the glass replaced. The seed should germinate within a fortnight when the glass is removed, but the immature plants must not be exposed to strong light or to sudden changes of temperature. When the young seedlings are large enough to be handled with care they are transplanted to seed trays, from which, when large enough, they are potted singly into 4in. pots and finally into 6in. ones. Throughout their cultivation calceolarias grow best in a cool, even temperature, and they must not be allowed to become dry at the roots. They are very susceptible to attacks of greenfly and every precaution should be taken to prevent these pests appearing in the house.

It is not too late to sow a second batch of cinerarias for flowering in the greenhouse during next spring. Plants from the first sowing required for winter flowering should be sufficiently advanced to be pricked off into trays. Those that are large enough can be potted up into 4in. pots.

Other Work for December

As the longest day approaches and warmer and more settled weather may be expected the more tender annuals, such as zinnias and celosias, can be planted out safely. Both grow best in a rich, warm soil, well sheltered from cold winds.

Cannas are always admired, both for their bold, handsome foliage and for the beauty of their flowers. In the warmer parts of the Dominion no difficulty is experienced in growing them to perfection; in the cooler districts more care is required. The plants should be given protection during the early stages of their growth and transferred to the open at this time of year, when the temperature of both ground and atmosphere is warmer. Where hard frosts are experienced, the crowns should be lifted in autumn and stored for the winter in a frost-proof shelter. Cannas will not tolerate dry conditions at the roots and grow best in a rich loam.

Most gardeners are familiar with the fibrous-rooted begonias for bedding purposes, but the tuberous-rooted varieties are much more handsome and more effective. Though the better and more expensive varieties are grown in pots for greenhouse decoration, many of those of less importance—particularly the ones with upright flowering stems and short joints—are suitable for growing in the open in favourable situations during summer. When well grown and in full bloom they make an arresting display. The plants are grown under glass during spring and early summer, gradually hardened off, and transferred to the open during December. The soil can hardly be too rich for them, but they must have shelter from cold and parching winds. Strong sunlight sometimes has a slight burning effect on blooms and foliage; to overcome this an



[Douglas Elliott photo.]

Funkias as a class are handsome, deciduous, herbaceous perennials, admirably adapted for growing in a bog garden or in cool, damp, shady situations. They may also be used to advantage in the flower border and, if given a suitable situation, make an effective edging. The plants grow best in a deep, rich soil, and the variegated forms require partial shading from strong sunlight or they are likely to suffer from sun-scorch. In addition to the bold, handsome, plantain-like leaves, the racemes of flowers varying from white to lilac are also attractive. The species illustrated, *Funkia lancifolia* var. *undulata*, has crisped or undulating leaves heavily variegated with patches and streaks of white. All the funkias may be propagated easily by dividing the crowns when the plants are dormant or just as young growth starts in spring.