## THE CULTURE OF CARNATIONS



[Sparrow Industrial Pictures Ltd. photo.

Carnations have been cultivated for centuries but they are still among the most popular of garden and florists' flowers.

made of 12-gauge wire. The operation is not difficult and may be carried out successfully even by the beginner. When all the layers of each plant have been put down, extra compost is added to cover the layers more adequately, made reasonably firm, and the whole given a good watering.

During dry weather the layering bed should be kept moist to induce quick rooting, which should take place within a few weeks. About the beginning of March the young layers should be severed from the parent plant by cutting through the stems between the layer and the old plant. The young plants thus severed from their parent are left undisturbed for a few weeks until they are more firmly rooted, when they can be lifted carefully and transplanted to the prepared positions in which they are to grow and flower during the following season.

Propagation by Cuttings

Border carnations may also be propagated successfully from cuttings, which should be taken from good, healthy growths, but not abnormal or weak ones. The lower leaves should be removed close to the stem and the firm part of the stem cut squarely across just below a node or joint. The cuttings should be removed when perfectly fresh and must not be allowed to wilt to the slightest degree, but should be wrapped in damp scrim or placed in an airtight container until they are ready to be inserted. Sometimes cuttings sent from a distance may arrive somewhat wilted, in which case they should be steeped in water for 12 hours to enable them to revive.

When only a limited number of plants is required an effective and convenient method is to strike or root the cuttings in a 5in. pot. The pot, which should be thoroughly cleansed,

is "crocked" in the usual way—that is, about 2in. of drainage is placed in the bottom and covered with some material such as fibrous riddlings from compost, spent hops, or sphagnum moss to prevent the finer compost above from filtering down into and blocking the drainage. The compost consists of half soil and half clean river sand; some growers advocate all sand. The compost is made firm and even and moistened, after which the cuttings

are dibbled in from 2 to 3in. apart. The pot is then given a good overhead watering and plunged to the rim in sawdust, coke breeze, or similar material in a close frame or a cool part of the glasshouse until the cuttings have rooted. During this period an endeavour should be made to maintain an even temperature, to keep the cuttings shaded from direct sunlight, to prevent draughts, and not to allow moisture to collect on the foliage, though during hot, dry weather spraying them lightly during the heat of the day may be necessary to prevent their wilting. As soon as the cuttings have rooted they should be transferred to boxes containing richer compost or potted up singly into 4in, pots and grown on until they are ready to be planted in open ground.

Though perpetual flowering carnations may be layered as recommended for border carnations, some growers prefer to propagate them entirely from cuttings, it being considered that plants produced from cuttings taken from about midway up the stems give better results than those layered from the basal growths.

Pinks and Allwoodi carnations, because of their close, dense habit of growth, are propagated more easily from cuttings, which take root comparatively easily. Many of them are excellent for massing or as an edging for the flower borders. If a large number is required, the plants may be raised easily by dibbling in the cuttings in prepared boxes of compost covered with clean sand. As each hole is made with the dibble a small quantity of the sand falls to the bottom, thus forming a base on which the cutting rests when inserted. Plants raised in this manner may be transferred directly to open ground when well rooted.

## METEOROLOGICAL RECORDS FOR OCTOBER

Station		Height of station above M.S.L. (ft.)	Air temperatures in degrees (Fahrenheit)				Rainfall in inches					
			Арргох, теап	Difference from normal	Absolute maximum and			ys	nai	Maximum fall		sunshine
					Maximum	Minimum	Total	No. of days of rain	Difference from normal	Amount	Date	Bright su hours
Kerikeri	14.	201	58,6	+ 3.4	77.0	36.5	1.53	9		0.26	30,	198.
Auckland Tauranga Ruakura Rotorua Gisborne New Plymouth Napier Taihage Wanganui Palmerston North Walngawa Wellington Nelson Blenheim Hokitika Hanmer Springs		160 10 131 980 12 160 5 2157 72 110 350 415 24 12	59.8 57.6 55.8 55.0 55.8 55.8 55.2 55.8 55.0 55.8 55.0 55.8 55.0 55.8 55.0 55.8 55.0 55.8 55.0 55.8	+ 2.6 - 1.7 - 1.0 - 2.4 - 2.7 - 1.5 - 2.3 - 2.6 - 2.4 - 2.0 - 1.2 - 1.7 - 3.3 - 1.2	74.6 73.0 70.7 71.0 80.2 64.5 81.0 70.3 73.3 72.0 73.0 64.0 71.4 79.7 60.0 77.0	46.0 33.8 33.8 33.0 32.8 37.6 35.9 34.0 39.4 37.0 30.8 40.2 36.3 30.4 37.6	2.24 1.21 3.62 1.57 1.63 5.12 0.60 2.30 1.21 2.93 1.01 2.78 3.77 1.37 1.803 2.19	16 11 16 12 11 16 8 15 13 16 10 13 11 6 24	- 1.77 - 3.73 - 0.39 - 3.43 - 0.61 - 0.45 - 1.32 - 1.06 - 2.14 - 0.62 - 1.89 - 1.11 + 0.23 - 0.78 + 6.67 - 1.70	0.52 0.27 1.04 0.38 0.65 1.20 0.26 0.41 0.39 0.50 0.38 0.90 1.09 0.38 3.80	31 31 14 14 14 10 14 10 8 14 14 2 7 8 9 5	180. 209. 199. 174. 220. 183. 227. 219. 156. 229. 194. 248. 275.
Christchurch Christchurch Ashburton Timaru Alexandra Taieri	*****	22 323 56 520 80 32	57.3 56.6 55.2 55.4 54.2 53.5	- 3.0 - 4.3 - 5.0 - 2.6 - 3.2 - 3.1 - 3.3	81.8 84.4 80.2 77.6 79.4 75.0	36.3 37.2 33.0 34.0 31.3 28.0	0.62 1.13 0.65 0.66 2.35 5.07	8 5 7 9 13 15	- 1.24 - 1.07 - 1.21 - 0.57 + 0.16 + 1.49	0.24 0.43 0.20 0.15 0.57 0.98	30 2 8 23 5 23	236. 208. 212. 190.