



The Winning Garden in the St. Thomas Lawn and Garden Competition

The first prize garden of W. R. Rowbotham, of St. Thomas, Ont., is here shown. Mr. Rowbotham has developed it in only two years. A fuller description will be given later.

borne on different plants of the same species, the pollen must of necessity be transferred from the staminate flower of one "dioecious" plant to the pistillate flower of the other. After the act of pollination is performed the flowers are covered with the paper sacks, and the operation completed by affixing a small tag bearing essential data.

Nearly everyone knows the beautiful Primrose, *Primula obconica*, a plant commonly grown in a great many homes. I have chosen this plant as an illustration on account of that fact, to show the possibilities of practical plant breeding.

It is plainly evident from Figure 1 that great improvement has taken place. The small flower represents the original species; the medium one, that of an improved variety called *gigantea*; and the large flower that of a cross between *Primula obconica* and *Primula megalacifolia*. Although the flowers of the hybrid were not larger than those of the variety *gigantea* originally, this enormous size has been attained by selection through several generations, plants possessing the largest flowers having been selected for seed. Up to date each succeeding generation has given us larger flowers than its progenitor.

The plant is very floriferous, and the umbellato inflorescences, which are remarkably large and borne on long, rigid stems, measuring in some cases 18 inches, are most desirable as cut flowers. In this respect a new feature is introduced. Figure 2 speaks plainer than words.

(To be continued)

Plants should have a rest, and that is accomplished by withholding water, lowering the temperature in which they grow and not giving them any stimulant.—E. F. Collins, Toronto.

Fall Care of Roses

Wm. Hunt, O. A. C., Guelph, Ont

Bush roses should have a banking of earth placed around them toward the end of the month, or early in November before hard frosts set in. The earth should be banked up in a conical form eight to ten inches high around the plant and patted down firmly with a spade, so as to pitch off the moisture. Late in November or early in December some straw or strawy manure, three or four inches in depth, should be placed on top of this. This latter covering should not be put on too early. It can be left until the first light snow has fallen. By leaving the covering off until late, the wood or growth becomes thoroughly ripened.

Tea roses or Hybrid Teas require rather more care in protecting them during winter than do hybrid perpetuals. Instead of putting the loose strawy covering over them, it is best to tie the growth up in a bunch rather closely, and then thatch it with long straw, binding it around with strong twine. The straw should be put on in such a way as to exclude and pitch off all moisture. Putting dry autumn leaves

around the plants and then covering them with an inverted sugar or flour barrel is a good method of covering tender roses. This method is, however, very unsightly on a lawn.

CLIMBING ROSES

Climbing roses should be taken down from the trellis they are trained on, and the canes laid down as close to the ground as possible without breaking them. About the end of October is a good time to lay them down. Strawy manure, or straw, may be used for a covering for climbing roses. This should not be put on until quite late in November, for the reasons before mentioned. The covering should be about two or three inches in depth. Dry leaves may be used first with a light covering of strawy manure over them to keep them in place. There is some objection to leaves on account of harboring mice. Curr stalks should never be used for the same reason.

Green pine or spruce boughs make a good covering for roses. A light covering of soil can also be made use of. The latter sometimes causes damage to the canes from the weight, and if the season should be mild and wet, soil often induces mildew, and keeps the canes too green and soft by the exclusion of air, and the retention of too much moisture. Some material that will afford a slight protection, admit air, and help to hold the snow around the plants is the best material for protecting climbing roses in winter.

Planting Roses

W. G. McKendrick, Toronto, Ont.

November in Toronto, is the best month to plant or transplant roses, as the wood is well ripened and the roots take hold and start off quicker than if planted in April, when most of my planting has been done. If you cannot plant in November, April or even May will give splendid results and lots of flowers if two year old roses are purchased. If budded roses are planted, place the joint from one to two inches below the surface and



Sweet Peas, Seven Feet High, Grown by Arthur Walker, Cobourg, Ont.