

should be made as for seeding. The lawn maker should see that the sod supplied is thick enough to include a fair

proportion of growing roots, and so ensure the grass getting a good start in its new feeding ground.

Planting and Pruning Shrubs

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IN order to arrive at the proper time and method of pruning shrubs a study of their characteristics is necessary. For this purpose we must recognize two distinct types, distinct in the sense that one flowers upon the current year's wood, and the other upon the old or previous season's growth. It is easy to distinguish between the two. As a general rule shrubs should be pruned at once after flowering if pruning is necessary, but in the case of the more tender ones which flower upon the current season's growth, it is unwise to prune before danger of heavy frosts is past in the spring, say about the first week of April. roses and hydrangeas. There is always danger when these are pruned early in the season, of the remaining buds being killed, which is often the case when bright sunlight succeeds excessive frost. When this occurs the plants may be seriously injured, and the resultant growth and flowers worthless.

Lilacs, Shubby Honeysuckles (*Lonicera*), Weigelia, Snowballs (*Viburnum*), Deutzias, Forsythias, and similar hardy shrubs should all, if necessary, be pruned at once after flowering, and the old flowers removed from such as the lilac before seed formation has occurred.

In the case of shrubs, except evergreens, which are dependent upon the formation of new growth for the following season's flowers, the immediate removal of old flowering wood or branches favors the development of new growth and the subsequent ripening of vegetative or flowering buds ere winter sets in. Shrubs, however, bearing berries (fruits) which mature during the fall should not be pruned after flowering, as this will eliminate their winter beauty, as upon the flowering branches the berries are borne. In this category are such examples as *Berberis* of many kinds, snowberries white and red fruited (*Symphoricarpos racemosus* and *Vulgaris*), and deciduous species of *Euonymus*, many of which bear very ornamental fruits.

BENEFITS OF PRUNING

The objects of pruning are: To encourage the development of vigorous growth and the subsequent production of flowers; to eliminate worthless branches and superfluous growth, and thus favor the equal distribution of air and light: To remove defective parts, and to promote growth to replace these and thus assist nature to restore symmetry.

It is an easy matter to remove all undesirable growth, providing certain principles are observed. When remov-

ing branches, do not leave stubs, each undesirable portion should be removed with a slanting cut at its junction with another stem or just above a bud. Whenever it is necessary to shorten or "head back" the longest branches all should not be cut at the same height.

Growth should be encouraged close to the ground rather than at the apex of the shrub. To induce this the longest branches must be gradually removed. As the stronger branches grow more quickly to the source of light, the weaker lateral ones eventually succumb. It is a case of the survival of the fittest, consequently the main stems near the ground appear bare and unsightly, therefore, the stronger must be removed to be replaced by the weak. Dilapidation quickly ensues where careful pruning is not exercised, but where the practice pertains renovation is constantly taking place much to the enhanced appearance of the subjects.

It is utter folly to clip shrubs into grotesque shapes unless they are planted as hedges or are included in a formal garden scheme. Clipped shrubs are not desirable for any other purpose, neither are they natural, as usually all their beauty and grace vanishes with the removal of growth which produces flowers. A well pruned shrub should appear to an artistic eye a perfect object, no sign of mutilation should be visible, the head should be perfectly symmetrical with being grotesque. Clipped shrubs are always grotesque, as the pernicious practice of hacking these beautiful subjects results in their total failure to produce annually their abundant blossoms. Shrubs differ from trees in that they possess no well defined leader (trunk). When pruning trees it is proper to retain the leader, but in the former no such leader should be encouraged.

ROSES

Roses planted in the spring should be cut back somewhat severely. Other shrubs may simply require thinning to counterbalance the loss of roots caused by lifting. Roses, however, which are established are pruned according to the characteristics of the class to which they belong. Hybrid perpetuals are stronger growers than hybrid teas, while climbing or rambling roses are distinct from either of the former. Strong growing plants should be pruned lightly, weak growing ones such as many hybrid teas severely, but in the case of ramblers it is only necessary to remove old or dead branches to prevent crowding of young



A Well Pruned Hydrangea

growths, or to allow such growths to be trained into desirable positions. It may also occasionally be necessary to shorten back the longest growths to keep the plants within bounds.

Briefly the shoots of hybrid perpetuals should simply be severed at points six inches or so from the previous season's wood, and all superfluous or weak growth removed. The mistake of cutting all at the same height should be avoided. Hybrid teas should be severely thinned, completely eliminating weak growths, leaving only the strong, say, three or four to each plant, or if these are exceptionally weak, only two. Cut these back to four inches from the old wood and the resulting growth will be much stronger than were a larger number allowed to remain, and will produce flowers of finer quality and in greater profusion.

HYDRANGEA

Prune the shoots of hydrangea paniculata back to two buds and after growth has commenced rub off one of the shoots, leaving the stronger in each case. Restrict the number on the plant to four or five. In this way weak unsightly plants will become rejuvenated, and if carefully cultivated and mulched enormous flowers will result. The illustration is that of a plant bearing individual flowers eighteen inches in depth and sixteen inches in diameter at the base, pruned in the manner indicated above.

Some of the Clematis are almost herbaceous in character, dying down to the ground in winter. Others, by protection, or during mild winters, come through the winter without the growth being killed back very much. If the wood is not killed back when starting them in the spring, it is well to leave some of the strong live wood rather than cut them right down to the ground. The variety Jackmanni is one of the best varieties grown. They flower on the new growth produced from older wood.—Wm. Hunt, O.A.C., Guelph, Ont.