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FREE—Cooperative Agricultural Extension Work—Acts of May 8 and
June 30, 1914

ABOUT ROSES

BY ALFRED C. HOTTES

What melody is to music, what expression is to the human voice, what rhyme is to poetry, what color is to painting, and form to sculpture—that the rose is to the realm of flowers. It holds a warmer place in the hearts of the people than any other flower, delighting the eye with its perfection of form and color, and rendering the air fragrant with its perfume.

Our language is filled with expressions derived from the rose. We speak of rose-tinted glasses, of rosy futures, of roseate hopes, of giving our confidences *sub rosa*, and telling our friends that they are as welcome as the roses in May.

To have one's own rose garden seems to many people a desire impossible of fulfillment, owing to unfavorable location and poor soil. At the same time that these persons are complaining, however, a neighbor is growing roses under the same conditions. If one is possessed of a real desire to have roses, and is willing to devote some time to their cultivation, there are no roses too difficult to grow. It is true that some varieties do not stand the cold, but for these, protection can be provided; insect enemies and diseases are discouraging factors which must always be taken into consideration, but these can be controlled. The bringing to perfection of one good rose is worth all the care it takes. The satisfaction of having roses from June until frost will be greater than that derived from the growing of any other flower.

LOCATION SUITED TO ROSES

Roses should be planted by themselves, in separate beds, so located that they are not exposed to heavy winds or surrounded by high walls or tall buildings. To grow roses properly, it is necessary that they have sunshine the greater part of the day. Avoid planting in places where trees and shrubbery will rob the roots of plant food and moisture. Perennial and annual flowers should not be set between the rose bushes, as they also take the fertility and water, and make the requisite stirring of the soil about the rose plants impossible. Such shallow-rooted flowers as pansies and sweet alyssum can, however, be planted to border the rose beds. Box barberry also may be used as a low hedge around each rose bed.

Hybrid perpetual and hybrid tea roses should not be used in place of shrubbery because the bushes themselves are seldom beautiful in form or foliage. In enjoying roses we must look at the rose bloom and not the bush. A good rose for planting as a specimen or

among shrubbery is the Hugonis rose which blooms in May, has yellow flowers, and attractive small leaves and red thorns.

SOIL AND DRAINAGE

The best soil for roses is one of the heavier sort, but sandy soil will also give good blooms. The worst looking clay, after being enriched with manure, will grow roses to perfection after they become established for a year or two.

In heavy clay soils, or where water is liable to stand, it is necessary to furnish a means of drainage, as roses will not grow if water stands about their roots.

Roses usually give longer stems and are less susceptible to disease when they are growing in properly prepared beds. When

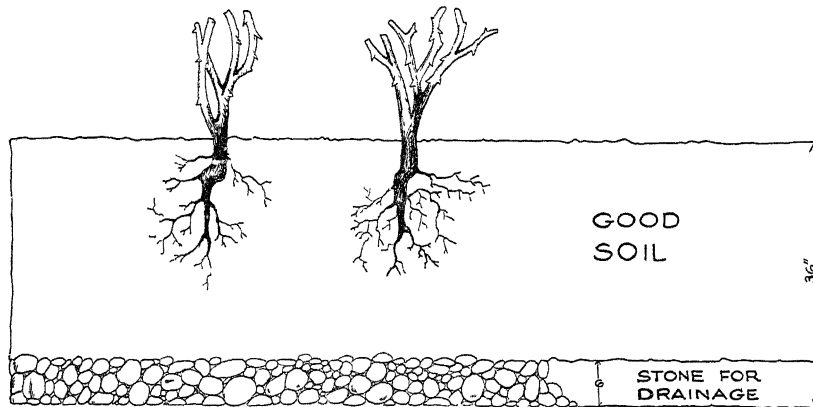


Fig. 1.—Method of preparing rose bed—note the 6-inch layer of stones for drainage. Distance between rose bushes should be as follows: Hybrid Perpetuals, 3 feet; Hybrid Teas, 18 inches; Teas, 15 inches.

making the rose bed, the soil should first be excavated to a depth of at least 2 feet—the deeper the better. Place a layer of stone, gravel, or coarse cinders, from 4 to 6 inches deep, as a foundation for the beds and as a means of drainage. Break up the soil removed, and enrich it with well-decayed manure, or discard some of the worst of the soil, replacing it with top soil from the surface of the garden.

Dr. Huey once said that it is better to plant a fifteen-cent rose bush in a fifty-cent hole than to plant a fifty-cent rose bush in a fifteen-cent hole. The best part of the advice is that holes will not cost fifty cents but give healthful exercise.

Any well-rooted manure or good compost may be used as a fertilizer. Acid phosphate or ground bone, at the rate of about 1

pound to each 8 square yards of soil, is excellent to work into the soil as deeply as possible. Rose beds should be prepared in the fall, as this gives the soil a better chance to settle.

PLANTING

Time of Planting.—Rose bushes may be planted either in the spring or in the fall. If planted in the fall, they should be placed early enough to get established before the winter sets in. Plants are in better condition when received from the nurseryman in the fall, but because of our open winters many amateurs find that there is less loss of plants when set in the spring.

Kinds of Plants to Buy.—Some nurserymen sell plants which are grown from cuttings. These are known as own-root roses and are catalogued as one- or two-year-old plants. The claim for such roses is that they send up strong shoots from the base of the plants, which bloom profusely. Generally such plants, however, are weaker in growth than plants which are budded.

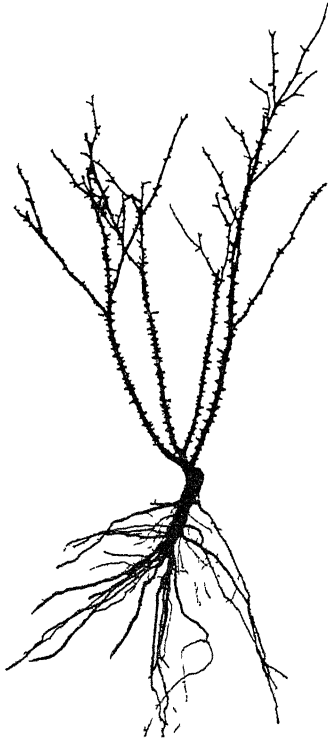


Fig. 2.—Two-year-old budded rose. Note the heavy roots of the stock which is two or three years old, the characteristic crook, the large diameter but few branches.

Either one-year-old or two-year-old plants may be purchased. One-year-old plants are sold cheaply because they are usually very small, and require patience and extra good care to get them to good blooming size. Two-year-old plants are better. The two-year-old plants are sold either as dormant stock or potted. Potted roses will not be set back when planted out-of-doors, and when buying one is sure of obtaining live, vigorous plants.

Several wild roses, especially the Multiflora and the Manetti, are grown by nurserymen and budded with desirable roses during the summer. Such roses have few branches, all of which are large in diameter (see Fig. 2). They push the growth and increase flower production, and in the writer's opinion are better than own-root roses. The superiority of either sort is greatly contested, however, there being strong advocates of each sort. The opponents of budded roses claim that there is a great danger of suckers, or wild shoots. It is

true that a few suckers do start, but the interested rose gardener will readily distinguish them. See Fig. 4.

As there are different religions and political parties and lodges, so there will always be two opinions about these two classes of rose plants.

Depth of Planting.—The usual advice in the past has been that roses should be set two or three inches deeper than they had been growing in the nursery, but such is now questioned inasmuch as by deep planting the roots are deprived of the requisite air. We advise setting the same depth as the rose plant grew.

Distance Apart.—Some roses are strong growers, and need to be planted a greater distance apart than those of weaker growth. The bushes should be so spaced that when full grown they will not be overcrowded. Hybrid Perpetuals should be planted about 3 feet apart; Hybrid Teas, about 18 inches apart; and Teas, 15 inches apart. Coarser growing Mosses, Rugosas, and old-fashioned Briar sorts should be given at least 4 feet and should not be planted in small rose beds but placed among shrubbery or for backgrounds.

Width of Beds.—To prevent the intrusion of grass roots, the rose beds should be at least 3 feet wide, and had better not be over 5 feet wide for convenience in picking and cultivating.

Prune before Planting.—Never plant a rose as you purchased it, but prune the plants when setting out, leaving three to five eyes on each cane. The climbers should be pruned in the same way, in order to insure a bushy growth the first year rather than blooms, as the two cannot be carried on successfully at one time. The roots should be spread out as much as possible, and the soil stamped firmly about them with the feet (see Fig. 1). The soil should then be thoroughly soaked, in order to settle it around the roots.

SUMMER CARE OF ROSES

Keep the surface of the beds continually loose; this retains the moisture and makes watering unnecessary except in the driest part of the summer. Do not stimulate late growth in September by cultivation, watering, or fertilizers.

When watering roses, lay the hose down on the bed and let it get thoroughly soaked. Water the plants thoroughly once or twice a week, preferably early in the morning or in the evening. This is better than light sprinkling more frequently. Spraying water on the leaves each day in the evening or early morning will help to remove dust and knock insects from the plants.

For summer fertilizing, cow manure and bonemeal are the two best fertilizers, the manure applied as a mulch in midsummer. Manure should also be dug into the soil in the spring.

Suckers, which may grow from the roots of budded plants, should be removed by scraping away the soil, and cutting them out where they start from the roots, as they will exhaust the vitality of the plant, and often kill it. They have a different appearance from the normal branches of the rosebush. There are usually seven or nine parts to the leaves of the suckers, the thorns are finer, and

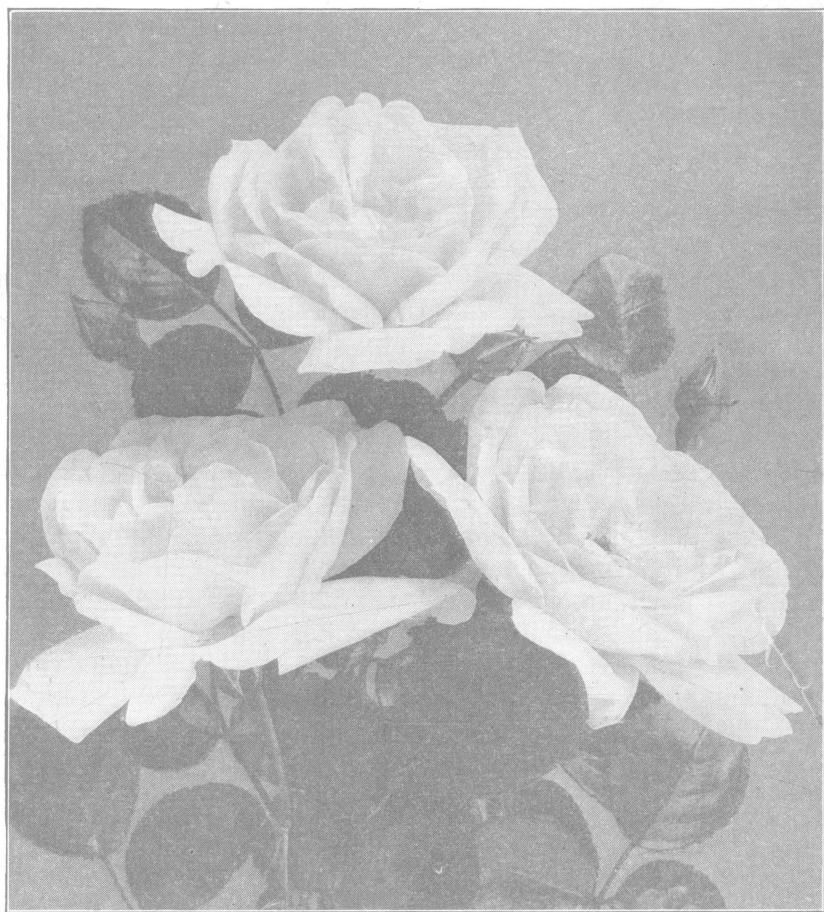


Fig. 3.—Dr. W. VanFleet, one of the finest large flowering climbers

the branches have a different color. Most of our hybrid perpetuals and hybrid teas, except the yellow varieties, have three and five parted leaves. No definite description can be given of a sucker because there are many sorts of wild roses which are used. They are never difficult to distinguish from the normal strong shoots from the bases of the plants.

PRUNING

There are two ideals in the pruning of roses, one to get each bush to produce as many flowers as possible, the other to get each flower as large as possible. The necessity for pruning may be well tabulated so that the various points can be seen in their proper relations. Roses are pruned:

1. To remove the old wood. Small wood which has produced flowers is no good in Hybrid Perpetual, Hybrid Tea, and those grown for individual blooms, and should be removed. Wood which has produced little side branches in the varieties used for landscape effect is not removed, thus moss and hedge roses come in this class. Climbers will require this type of pruning.

2. To improve the shape of the plant. Remove branches toward center of plant to keep center open; this is attained by cutting to an outside bud each time.

3. At planting time to keep a good balance between the top and the much-shortened root system. Prune to from three to five buds. Severe pruning always is necessary.

4. To improve the flowering according to the variety. This is the main reason for pruning Teas, Hybrid Teas, and Hybrid Perpetuals. For this, the amount of pruning depends upon the vigor. Prune the strongest shoots the least and the weaker ones the most severely, as those of Teas and Hybrid Teas need vigorous heading back.

5. Such hybrid perpetuals as Frau Karl Druschki, Paul Neyron, Ulrich Brunner, Mrs. John Laing, and Mrs. R. G. Sharman-Crawford will produce long blind shoots in early summer. If these are shortened, they will branch and produce flowers. Such pruning also keeps the plants from becoming too tall.

Time of pruning:

1. Hybrid Perpetuals and briars, and very hardy ones, usually in March.

2. Hybrid Teas and Teas not till buds start in spring. Often poor wood cannot otherwise be detected. These tender sorts are sure to freeze back or dry out if pruned before.

3. Prune some of the shrubby sorts after blooming, then new shoots will be sent out which the next year will produce good blooms. Hybrid Perpetuals should have summer pruning to remove the weak shoots allowing vigorous ones a chance. There is a gradual renewal of new wood which starves out old branches.

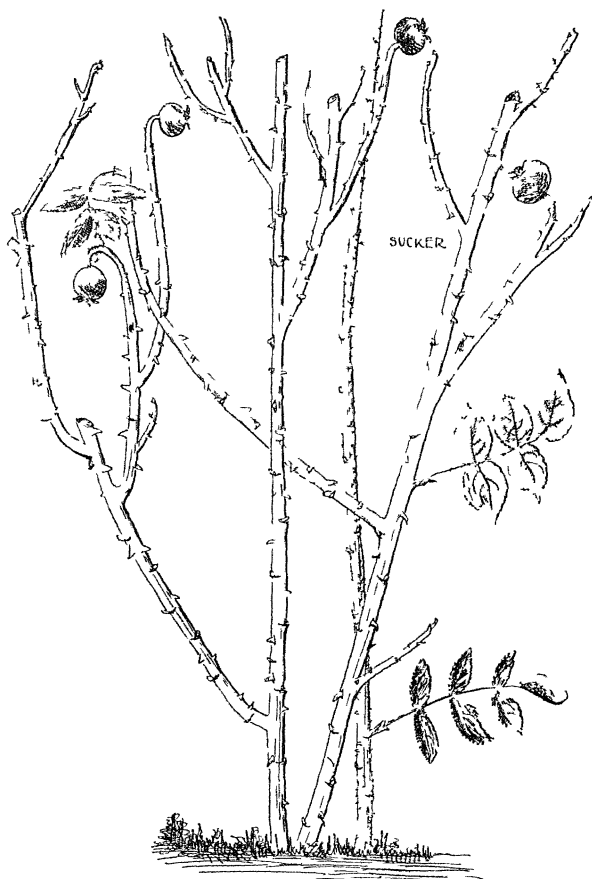


Fig 4—Rose bush before pruning (note the thorny sucker with its 7-parted leaf)

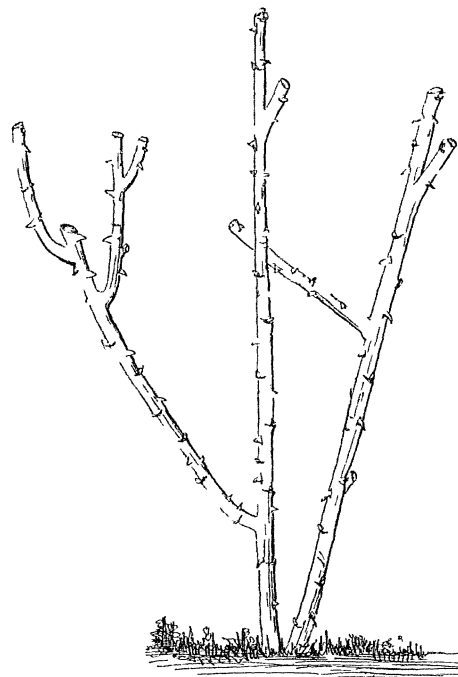


Fig 5—The same bush pruned as a Hybrid Perpetual

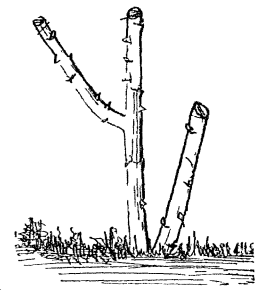


Fig 6—Same bush pruned as a Hybrid Tea

4. Prune all Climbers after flowering to induce the growth of the long, unbranched canes which may be trained in any desired form to bloom the next year.

5. Prune just before winter such Hybrid Perpetuals as have grown too tall and would be whipped about by winter wind.

INSECTS AND DISEASES

Should a housewife decide to make bread she would have to have an oven and necessary utensils; the same principle applies to the growing of roses—one must be supplied with the necessary equipment in order to have satisfactory results. Every rose grower should have on hand two insecticides at all times. As soon as the rose bushes are planted, buy a bottle of nicotine extract, a can of arsenate of lead, and some dusting sulfur. Use arsenate of lead for all worms or slugs which eat the foliage, and the nicotine extract for the insects which suck the juices but do not eat the leaves.

Leaf-Eating Insects.—Rose slugs, various caterpillars, and other insects that skeletonize the leaves are readily controlled by arsenate of lead.

Sucking Insects.—Plant lice (aphids) and leaf hoppers belong in this class; they are always present, and will require spraying every few days if they are to be checked. The object of nicotine is to suffocate the insects, consequently it must be applied with force and must actually hit the insects. Care must be taken to cover thoroughly each shoot infested.

Black Leaf 40 is the most economical of the nicotine extracts. It is effective against most plant lice at a strength of 1 part Black Leaf 40 to 800 parts of water. This may be combined with the arsenate of lead if both aphids and leaf-eating insects are present. If used alone, add 1 cubic inch of soap to each gallon of water.

Spraying Apparatus.—A bucket pump is better for use against sucking insects, because of the higher pressure obtainable. If the pump is equipped with a few feet of hose and a 4-foot extension rod furnished with an extra angle at the base of the nozzle, it is easier to direct the spray upward against the undersides of the leaves when necessary.

Diseases.—Black spot, which has been a serious pest for years, is now effectively controlled on most sorts of roses except those most susceptible, such as the yellow hybrid teas, or pernetianas. Dr. L. M. Massey advises the use of nine parts of dusting sulfur to one part of arsenate of lead powder. Dusting sulfur is more finely ground than flowers of sulfur. This can be applied with a dust gun or merely placed in a piece of cheesecloth and sifted on the plants.

Note that this dusting is a preventive and the treatment must be thorough. The true rose lover prefers to use it weekly before the disease appears, beginning in late May, and give seven to ten applications. The foliage need not be moist when applied. One part tobacco dust may be added to act as an insecticide.

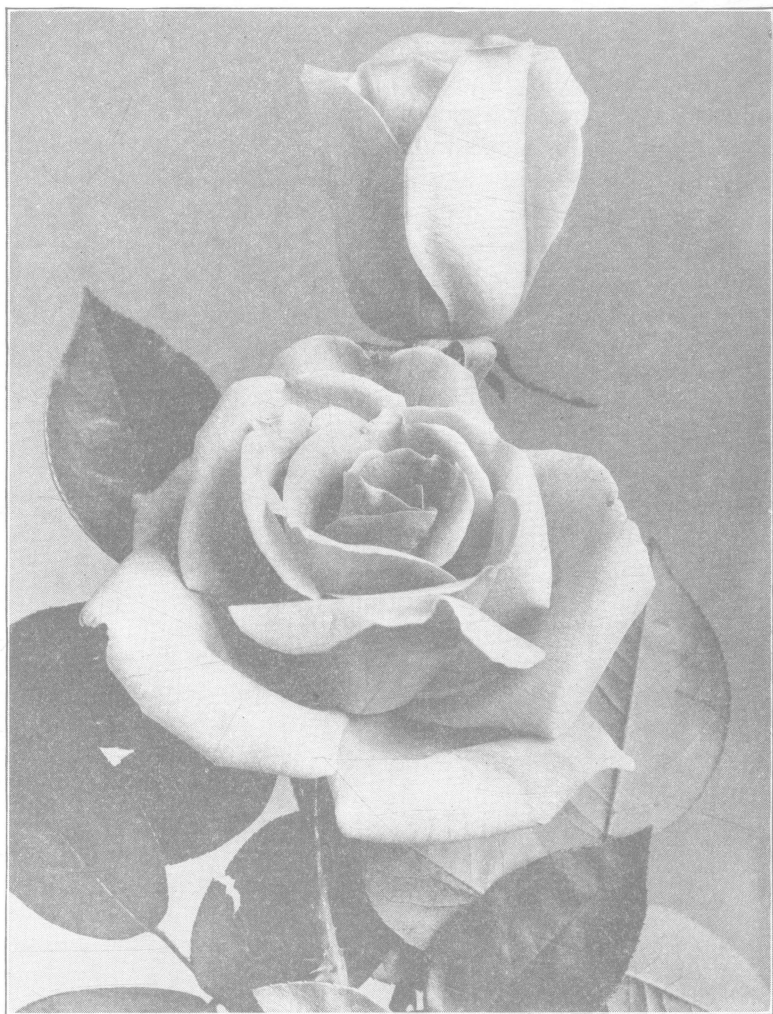


Fig. 7.—Pink Killarney. A good producer, and excellent for cutting

Mildew is treated with the same Massey dust as described for black spot. There is considerable comment in the American Rose Annual for 1926 on the use of potash as a rose fertilizer and as a preventive of mildew. Potash is well applied in the form of wood ashes.

PROPAGATION

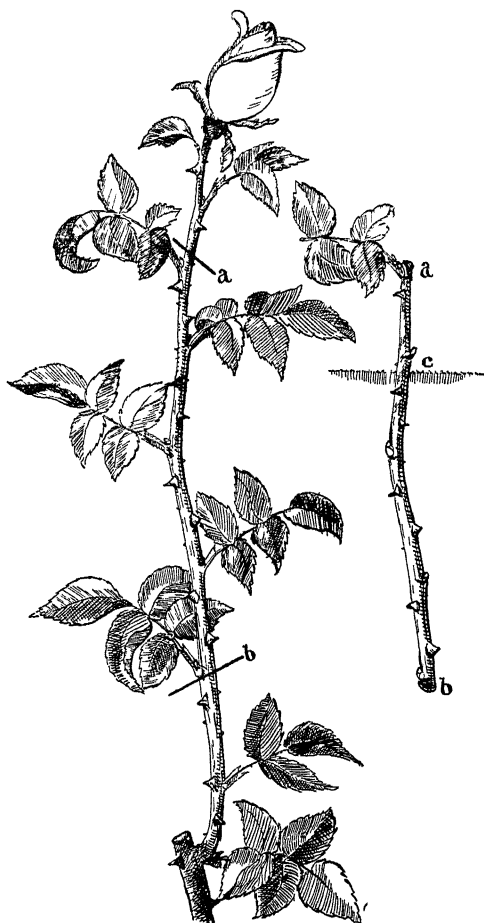


Fig. 8.—A rose cutting.—The flowering stem has been cut to make a slip (a, b). The soil level is shown at c, leaving an inch of the cutting above ground.

Cuttings.—For making slips or cuttings the best shoots to use are those which are blooming. Cut the flower with a stem about 6 inches long, cut off all wood of the stem below the lowest leaf, and cut off the shoot at the top down to a leaf that has at least five parts. This means that the cut should be just below an eye at the base and just above a strong eye at the tip. Remove all leaves except the top one and also take off its tip leaflet (see Fig. 8). Set the cuttings 3 or 4 inches deep in a loose soil or in sand, place a fruit or bell jar over it. The jar will keep the air moist, provided the cuttings are watered. Shade the jar for several weeks and the cuttings will root. When the cuttings start to grow slightly so that one realizes that they have rooted, they should be taken up and transplanted to good soil shaded for several days, and carefully cultivated.

Ramblers may be propagated easily by cutting the long stems into 6- or 8-inch lengths. During the winter, bury them in moist sand, either in a cool cellar, a cold frame, or in a well-drained spot out of doors. In the spring they will have rooted and should be planted out in the garden, where by careful cultivation they will make excellent plants by fall.

Layers.—The simplest method of increasing roses is by layers. Choose a branch that may be bent down, and cover it with soil.

Rooting will take place more readily if the branch is injured by cutting into the wood at a point under the soil. Climbers are very easy to increase by this method.

WINTER PROTECTION

It would be poor policy to buy plants, take care of them through the summer, and then neglect to protect them through the winter. When the first real freezing weather has arrived, start to protect the



Fig. 9.—Reliance roses, pink and red, make an attractive combination for a basket

roses. All of the Hybrid Teas, Teas, and most of the Hybrid Perpetuals will need winter protection.

The best protection is gained by hilling the earth about the base of the plants to a height of 8 to 12 inches. A common cause of injury in the winter comes from water being allowed to remain about the crown of the plants. This hilling of the soil will eliminate the difficulty. After the soil is drawn up about the plants, the

surface should be mulched with several inches of coarse strawy manure, which will not only serve as a protection against the cold, but will conserve the moisture in the plants and add to the fertility of the soil. Late in February and in March the strong sun causes the branches to become warm and start their growth. At night the air again becomes cold. Such alternate freezing and thawing is very injurious to the rose plants. To guard against this injury, the branches should be wrapped with burlap or straw, and tied, or the beds may be covered loosely with evergreen boughs.

Many rose lovers use orange boxes or peach baskets, turning them over the plants after they have been hilled up and mulched. Such protection will keep the winter rains and ice from contact with the plants. Many of the Briar roses and old-fashioned roses will need no protection for their tops. Merely hilling the soil about them a little will be sufficient.

In protecting Climbing roses, the hardiest sorts pass through the winter safely if they are grown in a sheltered situation where they do not have too much winter sunshine. The greatest injury to the climbing sorts is due to lack of maturity of the branches, it being the tendency of these roses to grow until stopped by the frost. If the climbers are planted in such a situation that covering them with burlap sacks will not be unsightly, this will make an excellent means of protection. Climbers are also well protected if their tops can be placed on the soil and covered with earth.

PRINCIPAL GROUPS OF ROSES

The two most important groups of roses for cutting as well as for garden display are the Hybrid Perpetuals and the Hybrid Teas. The following distinctions can usually be made between them:

Hybrid Perpetuals.—Name a misnomer, for they are not perpetually blooming; hardy, will usually stand much cold; more double flowers; bulkier and flatter buds and flowers; not tea scented; produce a large amount of bloom in June.

Hybrid Teas.—Many varieties are rather perpetual blooming; will stand cold only when protected; less double; pointed buds; strongly tea scented; lovelier colors than hybrid perpetuals; more bronze color in stems and foliage.

In the lists which follow are found the most popular varieties as chosen by referendum votes of the American Rose Society and experience of Ohio growers.

HYBRID PERPETUALS

- Frau Karl Druschki.**—Best white rose; large plant and flowers; without fragrance; will produce more than one crop of bloom; does not demand heavy pruning.
- Ulrich Brunner.**—Deep cherry color; strong plant; will produce more than one crop of bloom; fragrant.
- Paul Neyron.**—Light rose; immense size; very double; vigorous; almost thornless, free flowering; coarse, sometimes balls in autumn; used to supplant American Beauty.
- Mrs. John Laing.**—Standard clear pink; fragrant; not thorny; blooms more than once; good stems.
- George Arends.**—Soft pink, said to be better than Mrs. John Laing; vigorous.
- J. B. Clark.**—Very tall; crimson; sometimes light, more often dark; very thorny; not useful for rose beds, but in place by themselves; almost never bloom except in June.
- Prince Camille de Rohan.**—Often called a black rose; maroon crimson; not vigorous; low growth.

HYBRID TEAS

- Radiance.**—Rose pink; two tints; profuse blooming; strong growth; position in this list shows its preeminence among hybrid teas.
- Ophelia.**—Creamy pink, but fades white in bright sun; fragrant; not as good as the deeper colored Madam Butterfly which is not so well known; long, stiff stems.
- Mme. Butterfly.**—An improved Ophelia; intensified color; strong growth; large clusters of bloom, more prolific.
- Gruss an Teplitz.**—Deep crimson; tall growth; often 170 blooms per season; not good cutting; do not prune severely.
- Columbia.**—Bright pink; flowers often inferior in hot weather; good in cool season; long stems; free blooming.
- Red Radiance.**—Same as Radiance except color which is rose-red.
- Mme. Caroline Testout.**—Soft pink; cupped petals; splendid in some gardens, indifferent in others; unduly popular because of its success in Oregon.
- Lady Alice Stanley.**—Two tints of rose color; large plump buds; full flowers; continuous blooming; good for cutting.
- Duchess of Wellington.**—Coppery orange, blending to gold; one of best of color at present; good producer; quite disease resistant for a yellow rose.
- Mrs. Aaron Ward.**—Golden, but often fading pink; early; short stems; profuse; worth growing in spite of occasional poor color.
- Kaiserin Auguste Viktoria.**—Lemony white; large flowers; poor growth; will be superseded by such newer sorts, possibly, as Edel or Mrs. H. R. Darlington.
- Jonkheer J. L. Mock.**—Two toned carmine pink, inside of petals lighter; enormous buds and flowers; persist on plants for long time; color often muddy; rather poor producer; balls in moist weather.

Los Angeles.—Salmon pink, shaded yellow; superb color; subject to black spot; not persistent in garden; very popular but not universally successful.

Souvenir de Claudius Pernet.—Sunflower yellow; holly-like foliage; mentioned because of its popularity, but will no doubt be superseded shortly by roses of similar color which have more attractive form of flower, with a center which does not appear black.

CLIMBING SORTS

Dr. W. Van Fleet.—Most popular climber; soft pink; large flowers; long stems; good shining foliage; good cut flower.

Silver Moon.—Pure white with cup of golden yellow stamens; large flowers; long stems; good foliage; trifle tender.

Paul's Scarlet Climber.—Deep scarlet; non-fading; not a rampant climber; when better known it will be planted more commonly.

American Pillar.—Single pink, white center; extreme vigor; late; fades in bright sun; popular.

Climbing American Beauty.—Deep carmine; produced in small clusters; early; color becomes blue and unsightly; Bess Lovett suggested as substitute which blooms later.

Dorothy Perkins.—Light pink; tiny flowers; rapid and rampant grower; subject to mildew; late.

Excelsa.—Similar to Dorothy Perkins except that the color is crimson.

Tausendschon and Roserie.—The latter is an intensified improvement of Tausendschon, which usually fades from pink to a muddy white; not true of Roserie, which if it fades does not lose all color; almost thornless.

Gardenia.—Yellow buds but often fade white; is larger than Aviateur, Bleriot which it resembles; excellent shining foliage; often freezes back.

Christine Wright.—Soft pink; semi-double; cupped; early; not a rampant climber but good for fences and low trellises.

Mary Wallace.—Bright pink; large; not a rampant climber; newer than others here mentioned; recommended by American Rose Society as a dooryard rose.

POLYANTHA ROSES

The polyantha roses are dwarf roses which include some sorts that resemble hybrid teas, and others resembling the ramblers are known as Baby Ramblers. They are constantly in flower.

Gruss an Aachen.—Salmon pink with deeper buds, not unlike Ophelia but produced in clusters; long flowering season; disbud for cut flowers.

Eblouissant.—Intense crimson; twisted petals; dwarf; disease resistant.

Ellen Poulsen.—Bright pink; popular color; prolific.

Miss Edith Cavell.—Scarlet; single; large clusters.

Susan Turbat.—Coral rose; dwarf; unusual color in this class.

Results and Roses

By EDGAR A. GUEST

The man who wants a garden fair,
Or small or very big,
With flowers growing here and there,
Must bend his back and dig.

The things are mighty few on earth
That wishes can attain.
Whate'er we want of any worth
We've got to work to gain.

It matters not what goal you seek,
Its secret here reposes:
You've got to dig from week to week
To get Results or Roses.

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