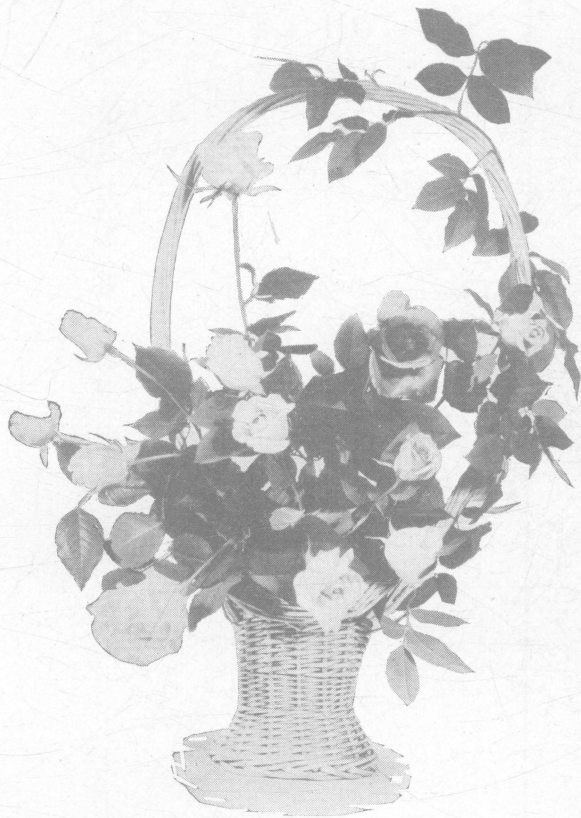


ABOUT ROSES



By ALFRED C. HOTTES
Department of Horticulture

CONTENTS

Introduction	3
Location suited to roses	4
Soil and drainage	4
Planting	5
Summer care of roses	6
Pruning	8
Insects and diseases	9
Winter protection	10
Propagation	10
Principal groups of roses	
Hybrid perpetuals	13
Hybrid teas	13
Teas . .	14
Climbing roses	14
Baby ramblers	15
Other good groups	16

ABOUT ROSES

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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 people than any other flower, delighting the eye with its perfection of form and color, and rendering the air fragrant with its perfume. It is fittingly spoken of as “the queen of flowers.”

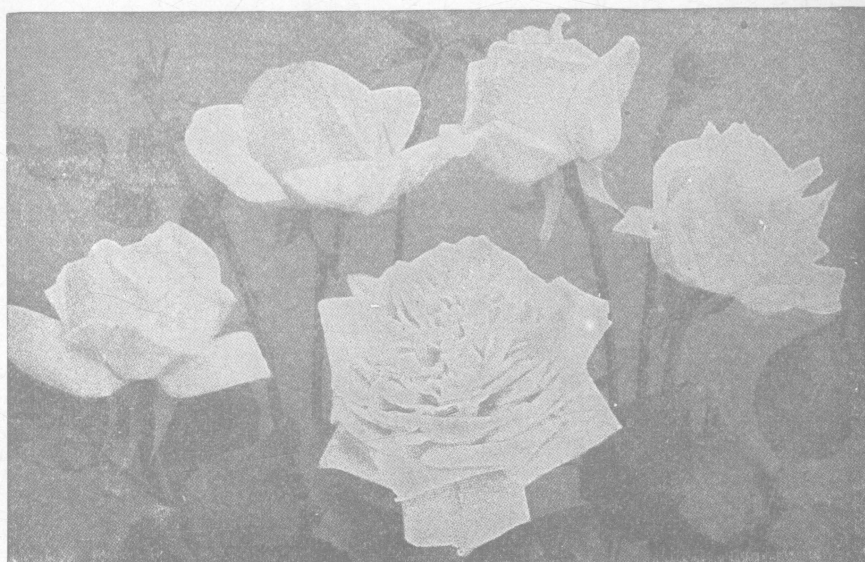


Fig. 1—A group of hybrid teas.

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 a rose garden of one's own seems to many people a desire impossible of fulfillment, owing to unfavorable location and poor soil, but 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, and the bringing to perfection of one good rose is worth all the care that 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

Rose bushes 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. Neither should perennial and annual flowers be set between the bushes, as they also take the fertility and water, and make the requisite stirring of the soil about the rose plants impossible.

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.

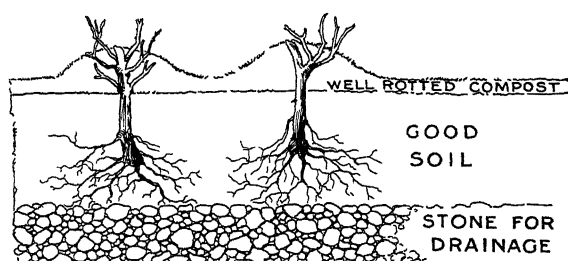


Fig 2 —Method of planting roses. Note the layer of stones for drainage

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.

When preparing the rose bed, the soil should first be excavated to a depth of at least 2 feet. 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.

Any well rotted manure or good compost may be used as a fertilizer. Ground bone, at the rate of about 1 pound to each 8 square yards of soil, is excellent to add as additional food to the surface 6 inches of soil. If possible, the 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 the danger of injury from freezing, it is better that they be planted in spring in Ohio.



Fig. 3—Dr. W. Van Fleet. One of the finest large flowering climbers.

Kinds of Plants to Buy.—Either 1-year-old or 2-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. Many of these have been budded on strong roots. For the first year or two these strong wild rose

stocks will push the tops better than will the natural roots of the plants, but these stocks will often send up suckers that will need to be removed.

Plants that are not budded are said to be own-root roses. These plants send up strong blooming shoots from the roots, which should not be confused with the suckers.

Depth of Planting.—The plants should be set 2 or 3 inches deeper than they were in the nursery rows. Budded roses should have the point of union between the stock and scion well covered. Prune the plants when setting out, leaving 3 to 5 eyes on a stem. 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 tamped firmly about them with the feet. The soil should then be thoroly soaked, in order to settle it around the roots.

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 usually should be planted 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.

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.

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.

When watering roses, lay the hose down on the bed and let it get thoroly soaked. Water the plants thoroly 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 off the insects.

For summer fertilizing, 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 below the surface of the soil when they appear, 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 more parts to the leaf of the suckers, the thorns will be finer, and the branches will have a different color.

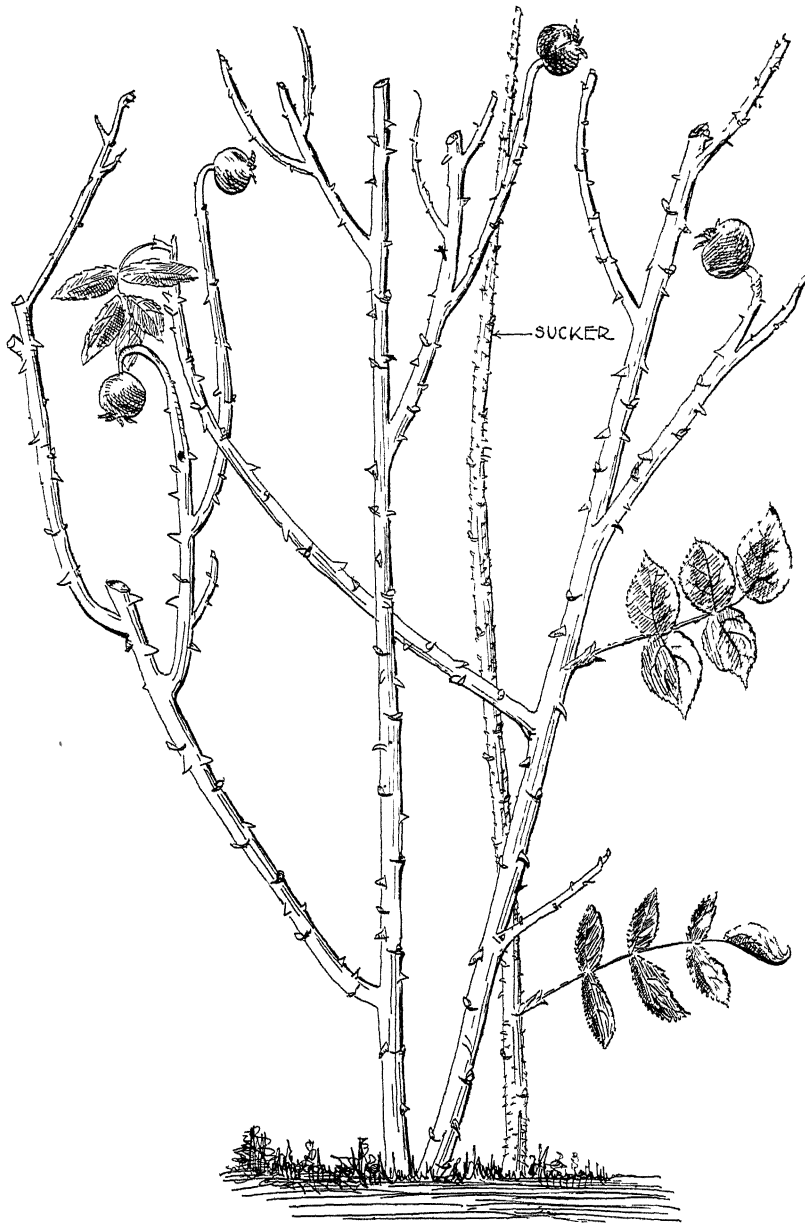


Fig. 4.—A rose bush before pruning. Note the 7-parted leaf on the thorny sucker. This sucker should be cut out below the soil. Most hybrid perpetuals and hybrid teas will have a 3 or 5-parted leaf and coarse, heavy thorns. Had the flowers been cut properly thruout the season, the rose fruits would not have matured.

PRUNING

If rose plants are observed it will be seen that they bloom from the stronger shoots of the previous season's growth, and that from the base of the plant extra strong wood is being produced each year, which causes the older, more branched shoots to become weakened. Each year the older,

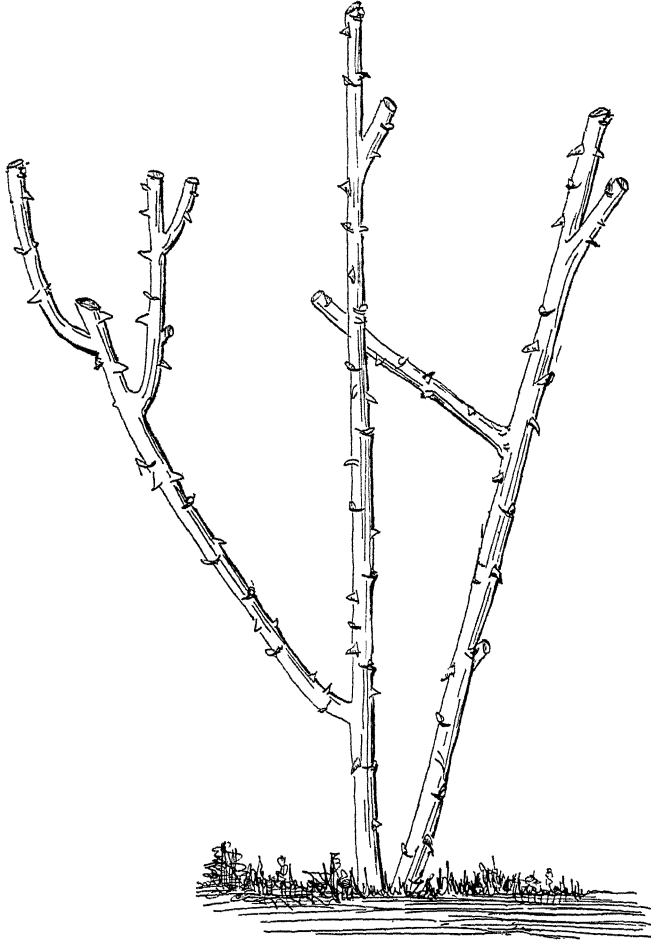


Fig 5—A hybrid perpetual rose bush after pruning This shows same bush as Fig. 4, pruned as a strong growing hybrid perpetual should be pruned

branchy shoots and dead wood should be removed, as well as the short, slender twigs: This is all the pruning necessary for climbers and briar sorts grown for mass of bloom.

Hybrid perpetuals, hybrid teas and teas are grown for individual large blooms and long stems—they need severe pruning. The weaker the sort

the more rigorous should be the pruning. Prune the hybrid perpetuals back two-thirds of their growth, and the teas and hybrid trees to within 5 to 8 inches of the soil. (See Figs. 5 and 6.) All pruning should be done in the spring.

INSECTS AND DISEASES

For the control of insects, every rose grower should have two insecticides on hand at all times—arsenate of lead and a nicotine extract. 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.

Plant lice (aphids) and leaf hoppers belong in the latter 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

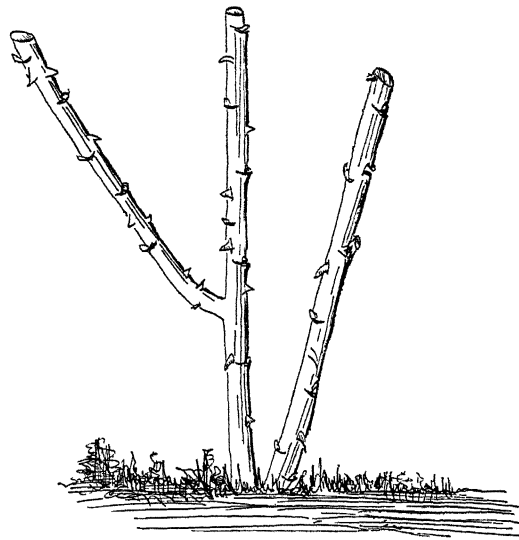


Fig 6—A hybrid tea after pruning This shows same bush as Fig 4 pruned for good, individual blooms when the bush is a hybrid tea

it must be applied with force actually to hit the insects. Care must be taken to cover thoroly 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. 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.

Mildew is the commonest disease, and is difficult to control. Flowers of sulfur should be placed in a piece of cheesecloth and sifted on the plants in the morning while they are wet with dew. The sun will help to vaporize the sulfur. Dusting should be carried on once a week.

A black leaf-spot is usually destructive on some varieties of roses. The affected leaves should be picked, burned, and the plants sprayed with potassium sulfide, 1 ounce to 3 gallons of water.

WINTER PROTECTION

It would be poor policy to buy plants, take care of them thru the summer, and then neglect to protect them thru the winter.

When the first real freezing weather has arrived, start to protect the 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 peachbaskets, 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 thru 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.

PROPAGATION

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.

Seed.—The wild roses, such as the shrubby sorts used for landscape purposes, are usually increased by seeds. The seeds are collected in the fall and washed from their fruits. They are then sown in shallow boxes of sandy soil and placed in a protected spot out of doors, preferably in a cold frame. Here they must freeze, so that their seed coats are cracked. They will germinate in the spring.

It is interesting to hybridize roses and grow them from seed. The results are very uncertain, but often very interesting. One cannot tell before the new plants bloom just what kind of a rose to expect. Many will be worthless, but occasionally one is rewarded by securing a really worthy rose.

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 leaf-

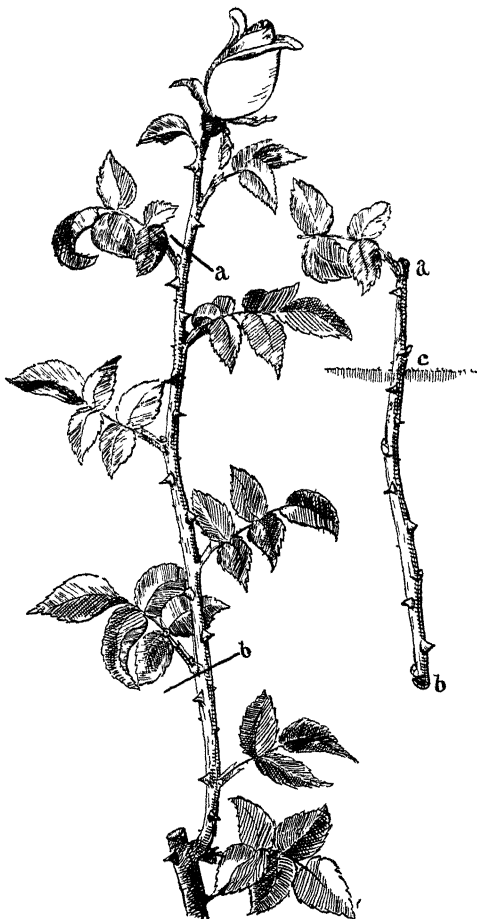


Fig 7—A rose cutting —The flowering stem has been cut to make a slip (a, b) The soil level is shown at c, leaving an inch of the cutting above ground

let. (See illustration, page 11). 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

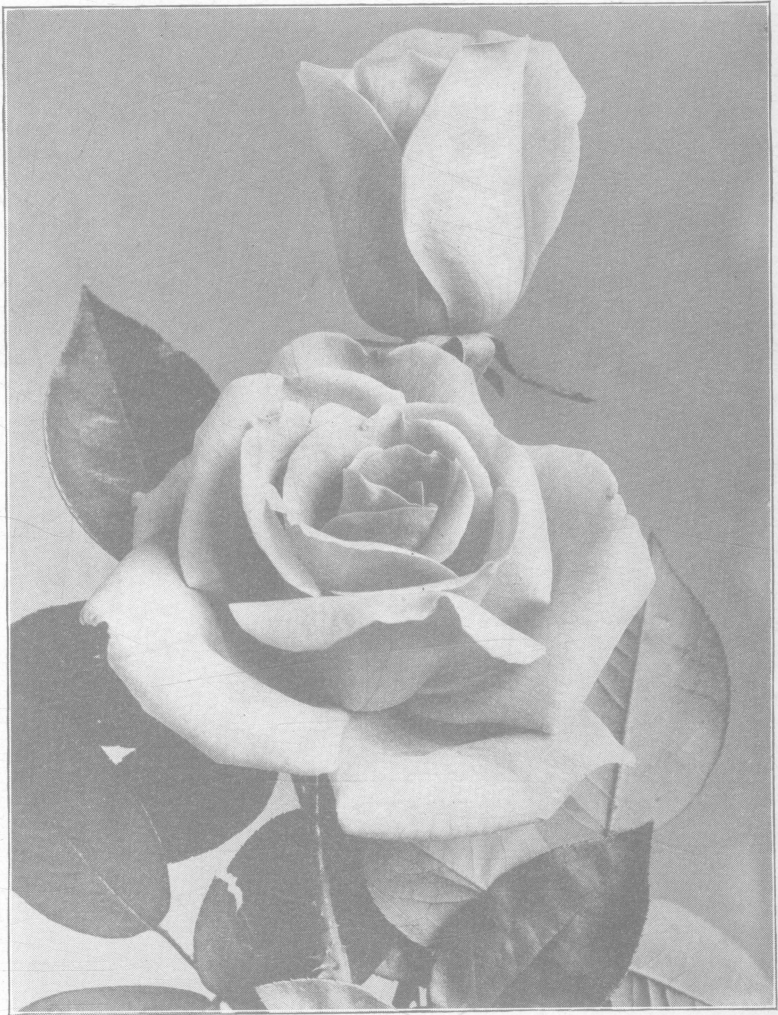


Fig. 8.—Pink Killarney. A good producer, and excellent for cutting

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.

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.
 Flatter buds.
 Not tea scented.

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.

HYBRID PERPETUALS

White—

Frau Karl Druschki—Best white; large flowers; every garden requires this variety.

Deep Red—

Prince Camille de Rohan—Almost black; best of color.
 General Jacqueminot—An old standard red.
 J. B. Clark—Large scarlet flowers; one of strongest growers.
 Ulrich Brunner—Good cherry color; fragrant.

Light Pink—

Mrs. R. G. Sharman-Crawford—Fragrant; prolific; hardy.
 Anne de Diesbach—Large; hardy; almost thornless.
 Paul Neyron—Largest rose; rather coarse.

Flesh Color—

Clio—Vigorous; flowers in clusters.
 Margaret Dickson—Vigorous grower; companion to Frau Karl Druschki.

HYBRID TEAS

White—

Kaiserin Auguste Viktoria—Extra large; sweet; free blooming.
 White Killarney—Good buds for cutting.

Deep Red—

Gruss an Teplitz—170 blooms per season; always in bloom; indispensable.
 General McArthur—Fragrant, splendid.
 General-Superior Arnold Janssen—Large; prolific.
 Laurent Carle—Fine finish; good shape; lasting.
 Madam Abel Chatenay—Excellent carmine rose, shaded salmon; flowers rather large.

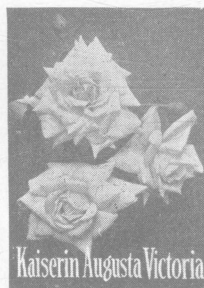


Fig 9.



Fig. 10

Light Pink—

- Jonkheer J. L. Mock—Two colors; large; good stems.
 Killarney Brilliant—Fine effect; prolific.
 Lady Alice Stanley—Lasting; good for cuttings.
 Lady Ashtown—Excellent color; good form.
 Radiance—Large; free flowering; strong growth.
 Ophelia—Lovely salmon pink; good form; excellent in every way.
 Columbia—A new rose which should be very useful in the garden.
 Los Angeles—Coral pink; excellent distinct color.

Yellow and Copper Shades—

- Duchess of Wellington—Distinct color; good growth; one of the best of this color.
 Mrs. Aaron Ward—Small flowers; attractive.
 Miss Alice de Rothschild—Good color; fine form; not so hardy.

TEA ROSES

With the exception of Hermosa, it is not advisable to plant too many tea roses; they are too tender, and require so much care that they should be grown only by one who is truly a rose enthusiast and will give them careful attention.

Pink—

- Maman Cochet—Most hardy of teas; profuse blooming; beautiful bud; growth low.
 Mrs. Georges Shawyer—Lovely pink; seems to be an excellent bedder.
 Hermosa—Delicate color; small size; this is one of the hardiest of the China roses. It blooms from June until frost continuously.

White—

- White Maman Cochet—Somewhat tinged with yellow; as good as Maman Cochet.
 Clothilde Soupert—White, creamy tinge; good as an autumn rose; small flower; producing all summer.

Crimson—

- Papa Gontier—Perfect bud; long stem.

CLIMBING ROSES

Pink—

- Dorothy Perkins—Delicate color; one of the best climbers; foliage excellent, glossy.
 Tausendschon—Several shades of pink; one of the large flowering climbers indispensable for each person's rose garden.
 Christine Wright—A lovely pink; large flowers, borne singly and in cluster; beautiful in bud and bloom.
 Dr. W. Van Fleet—Flesh pink; large blooms; excellent foliage; strong grower; one of the best.

White—

Silver Moon—White with golden stamens at center; superb foliage.

Crimson—

Philadelphia—A much better rose than the Crimson Rambler; but a trifle later.
Excelsa—Deep crimson; an exceedingly hardy, rapid growing climber of a brilliant color.

Hiawatha—Ruby carmine; one of the finest single climbing roses; the plants are a mass of bloom.

Yellow—

Aglaiia—Buds canary yellow, but the flowers are white when open; flowers borne in profusion.

Gardenia—small, double, yellow flowers; should be grown only by those rose lovers who will take the plant down during the winter and protect its top.

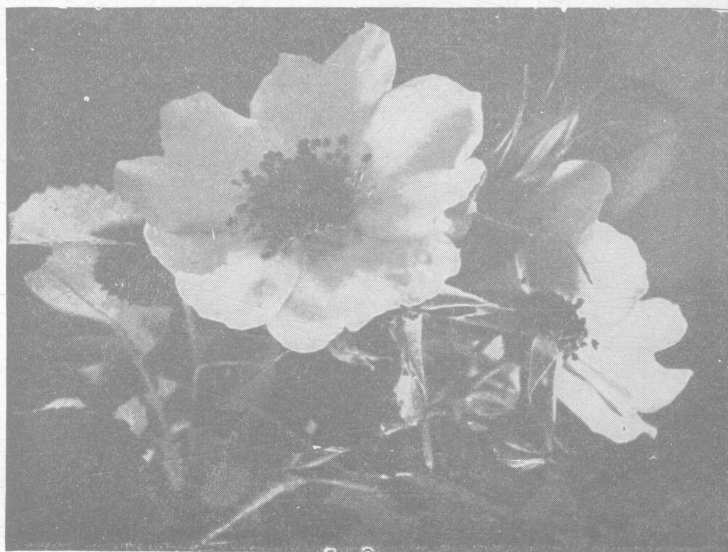


Fig. 11.—Silver Moon. An excellent single white climber, with golden stamens.

BABY RAMBLERS

Crimson—

Madam N. Lavavasseur—Standard crimson Baby Rambler.

Erna Teschendorff—Redder than above variety.

Triomphe Orleannais—Most brilliant cherry crimson; excellent producer.

Pink—

Echo—Rather new; resembles Tausendschon, but dwarf; vigorous; prolific.

Ellen Poulsen—Prolific; bushy growth.

Mrs. Cutbush—Good color; prolific.

White—

Catherine Zeimet—Standard white.

OTHER GOOD GROUPS

MOSS

Crested Moss—Pink; excellent; very mossy.
Blanche Moreau—Standard white moss rose.

RUGOSA HYBRID

Conrad F. Meyer—Clear silvery pink; popular Rugosa hybrid.

SWEETBRIAR HYBRID

Meg Merillies—Free flowering crimson; sweetbriar hybrid.
Lord Penzance—Rather large bloom.
Amy Robsart—Flowers medium size; bright rose in color; leaves very fragrant.

YELLOW BRIARS

Rosa Hugonis—One of the very earliest yellow roses; new; shrubby sort.
Harrison's Yellow—Clear yellow briar; hardy.

The College of Agriculture at Ohio State University is your college. You are entitled to the assistance of the entire college staff, but particularly so of the Extension Service. The Extension Service will see that help is rendered to anyone in the state along all agricultural lines.

If you have any problems pertaining to your flower garden, do not hesitate to present your problems to *your* college and to *your* university.

Questions pertaining to the choice of flowers, desirable varieties and cultural methods can be answered for you promptly by the Department of Horticulture.