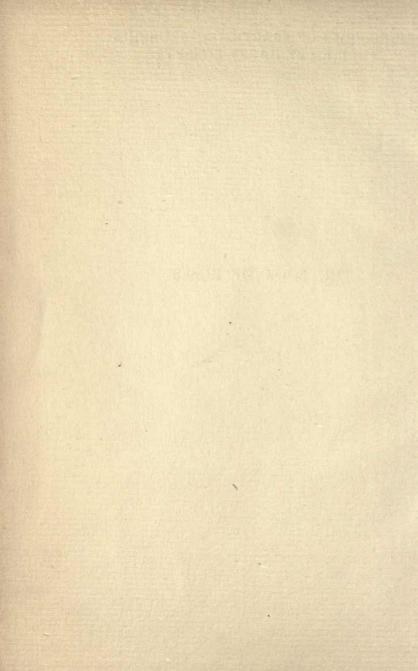


HANDBOOKS OF PRACTICAL GARDENING EDITED BY HARRY ROBERTS

THE BOOK OF ROSES





An exhibition Tea Rose. Salmon coloured

THE BOOK OF ROSES

BY

LOUIS DURAND



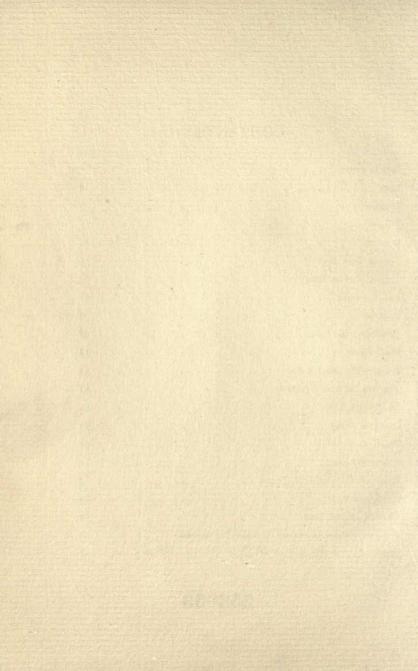
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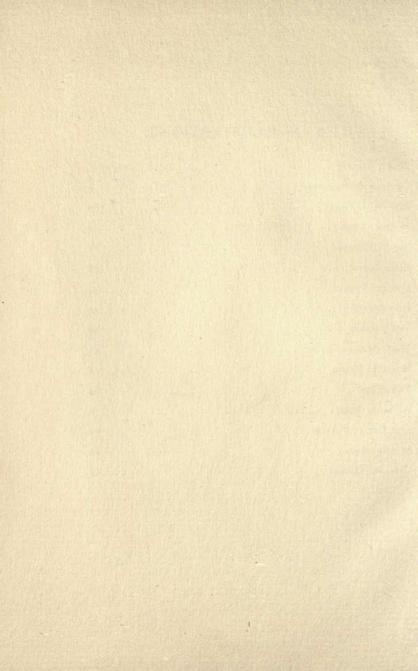
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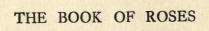
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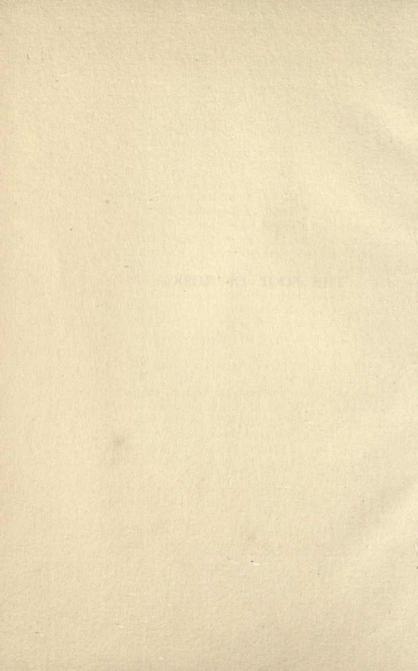


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THE BOOK OF ROSES

INTRODUCTORY

For the past two thousand years at least the Rose has held the title of the Queen of flowers, for Sappho, who lived six centuries before Christ, wrote, "If Jupiter wished to give the flowers a queen, the Rose would be their queen." And Anacreon devotes an entire ode to praises of the Rose.

"Friends! form your accents with mine, in singing

the season of flowers, and the Rose of spring.

"The Rose is the sweet perfume which the mouths of the gods exhale; the joy of mortals, the loveliest ornament of the Graces in the flowery season of love, and the dearest delight of Venus.

"The Rose is the object of the songs of the poets, the

favourite plant of the Muses.

"Though she wounds us with her thorns, we gather her with pleasure. What delight to hold this flower consecrated to love, and to breathe its sweet odours!

"Ah! what should we be without the Rose?

"Our poets sing of the rosy fingers of Aurora, the rosy arms of the Nymphs, the cheeks of Venus, tinted with Roses.

"The Rose is useful to the sick; she braves the duration of years; agreeable even in decay, she preserves the

perfume of her youth.

"What shall I say of her origin? When the Sea formed from her froth and displayed on her waves the beautiful

Venus, brilliant with dew,—when Pallas sprang forth armed from the brain of Zeus, the earth brought forth this admirable plant, a new masterpiece of nature. Eager to hasten her blooming, the gods watered her with nectar, and then this immortal flower elevated herself majestically on her thorny column."

India and Persia are almost the home of the Rose, and the Persian poets are full of her praises. The imagery of Omar Khayyam is wreathed throughout with the flowers and thorns of the Rose, and it occurs with almost wearisome reiteration in the Arabian and Persian tales. Sâdi, the author of the work called the "Rose Garden" and one of the most famous of Persian poets, held the Rose as his favourite flower,-it is said on account of the circumstances attending his liberation from slavery. His master had often promised him his liberty, but tarried in fulfilment of the promise, and Sâdi one day went to him with a rose in his hand. "Do good," said he to his master, "while yet thou hast the power, for time is fleeting, and the season of power is often as transient as the duration of this flower. Do not delay longer the fulfilment of thy promise, O my master!" The words so struck his master that he liberated Sâdi at once.

The Rose and the nightingale are associated in Persian poetry, the tradition being that the bird cries out whenever a Rose is gathered, and will hover round the flower in the Spring until overcome by its perfume.

> "With 'wine! Red wine!' the nightingale cries to the rose, That sallow cheek of hers to encarnadine."

And until the nightingale calls to her to awaken, the Rose will not open her buds.

The Rose is the basis of many of our proverbs, and has passed into the common speech in thousands of similes,

most of them simple and obvious enough. The phrase, "under the rose," either thus or in its original form of "sub rosa," though frequently used is of more ancient origin. The Rose was given by Eros to Harpocrates, the god of Silence, that he might keep secret the doings of his mother, Aphrodite; hence the Rose, the symbol of secrecy and silence, was carved on the roofs of the Roman banquet-halls, and wreathed in their garlands, as a hint that all things spoken in that place were privileged, and not to be repeated in more sober moments.

Horace and Pliny speak of the Rose and its cultivation in gardens, and the wealthier Romans were accustomed to make extensive use of Rose petals for strewing on the floor and couches at their banquets. In England, at any rate from the fifteenth century onwards, the supremacy of the Rose has been practically unchallenged, and Chaucer wrote—

"The savour of the roses swote, Me smote right to the herté rote, As I hadde alle embaumed be.

Of roses there were grete wone, So faire were never in Rone."

And a little later Dunbar laid it down that

"no flower is so perfite, So full of virtue, pleasaunce, and delight."

Gerarde, a little later still, gave the gardener's view. "The Rose doth deserve the cheefest and most principall place among all flowers whatsoever, being not onely esteemed for his beautie, vertues, and his fragrant and odouriferous smell, but also because it is the honore and ornament of our English Scepter." Shakespere's references to the Rose are far too numerous to quote. "Gloves as sweet as damask roses," "I'll say she looks

as clean As morning roses newly washed with dew," "With cherry lips, and cheeks of damask roses," are but specimens of hundreds of apt references to the Roses of that age. Then again there is the second act of 1st of Henry VIth which is simply full of references to the red and white Roses of the houses of Lancaster and York.

The National Rose Society (a society which every Rose-lover is bound in duty to join) names 1596 as the date at which it is known that the Cabbage or Provence Rose was first certainly grown in this country, but it seems probable that it was of earlier introduction. The bulk of varieties now grown in gardens, however, are of comparatively recent origin, nearly all having been created within the last century. By the middle of the nineteenth century several varieties still highly valued had made their appearance, among them being Devoniensis, Rubens, Souvenir d'Elise, Senateur V., Vaisse, and General Jacqueminot. Between 1860 and 1865 a number of other still valuable Roses were added to the list. These include Marechal Niel, Prince Camille de Rohan, Fisher Holmes, Alfred Colomb, Charles Lefebre, Duke of Wellington, Marie Baumann, and Xavier Olibo. From that time to the present infinite new varieties have been created, many of them of astounding beauty.

But still the origin of the Rose goes back beyond recorded history, and we shall do well to accept the legendary origin given by Sir John Mandeville, that

great and credulous collector of legend.

"At Bethelhem is the Felde Floridos, that is to seyne, the Feld Florisched; for als moche as a fayre mayden was blamed with wrong and sclaundered, for whiche cause sche was demed to the Dethe, and to be brent in that place, to the whiche she was ladde; and as the Fyre began to brenne about hire, sche made hire



COMTESSE DE NADAILLAC

A Tea Rose, peach colour, the bases of the petals coppery.

A favourite exhibition rose
(By courtesy of Messys. B. R. Cant & Sons)

preyeres to oure Lord, that als wissely as sche was not gylty of that Synne, that he wolde helpe hire and make it to be knowen to alle men, of his mercyfulle grace. And uhen sche hadde thus seyd, sche entered into the Fuyr, and anon was the Fuyr quenched and oute; and the Brondes that weren brenninge becomen red Roseres, and the Brondes that weren not kyndled becomen white Roseres, full of Roses. And these weren the first Roseres and Roses, both white and rede, that evere ony man saughe."

SOIL

Roses can be grown in a great variety of soils, and there are few soils which, if properly prepared, cannot be made to grow at any rate some kind of Rose in health and vigour. On the whole it is difficult to improve on the statement of that excellent Rose grower, John Cranston, of Hereford, that the best soil for Roses in general is that which contains the greatest proportion of loam, a deep stiff loam being what they most delight in. The worst of all is the black porous soil usually met with in town gardens, which contains a superabundance of humus or decomposed organic matter. Here the Rose will rarely thrive without the admixture of stiff loam or even clay. Sharp gravelly and light sandy soils are also bad for Roses. In many localities and especially by the seaside, where the latter usually prevail, it is often a difficult matter to grow any but the most robust and free-growing sorts. Rich peat soils are not at all unfavourable, and good Roses may be grown in boggy soils, provided they are thoroughly drained. There is, however, no description of soil to equal a good deep rich loam, rather retentive than otherwise, having somewhat of a greasy tendency; and if such is well drained there will be little or no difficulty in growing the most choice and delicate Roses. As, however, all cannot possibly possess these advantages, we must suit our Roses to our soil, and our soil to the Roses as best we can, and so happy and ready is the Rose to yield to our will and to become attached to our soil and locality that little difficulty will be experienced in improving what SOIL 7

Nature has given us to its advantage. Mr Cranston gave a number of useful hints on the improvement of different kinds of soils for the purposes of Rose-growing. In the case of all soils the first thing is to see that the drainage is satisfactory. After being assured that the drainage of the soil is perfect, let the ground intended for the Rose-garden be trenched to a depth of at least feet, and thrown up into ridges as the work proceeds. If this is done in the Autumn a few frosts and drying winds will soon make the stiffest soil friable and good to work, and when it is sufficiently dry, mellow and pulverised, let it be levelled down and formed into beds, or otherwise arranged for the reception of the plants. A few weeks before the time of planting the ground should be again dug to a depth of about 18 inches, and a liberal supply of good rotten manure should be incorporated with it. As giving an idea of the amount of manure commonly needed it may be given as a fair average to allow one barrow-load of manure to every 8 square feet of the ground. Gravelly or sandy soils are on the whole the most difficult of treatment. They can be greatly benefited by the addition of leaf mould and meadow loam, and by very liberal dressings of manure. It is also a good plan to keep their surface well mulched with manure, especially during the Summer, so as to prevent excessive evaporation. On a chalky subsoil Roses thrive, provided there is at least 18 inches of loam on top. Should the loam be shallower than this it will be necessary to make holes about 18 inches deep and large enough to take about half a wheel-barrow full of compost, consisting of two-thirds meadow loam and one-third rotten farmyard manure well mixed together. It is the experience of most growers that even the lightest and poorest soil can be made to grow Roses successfully if only it be deeply dug and kept

well enriched with manure. The actual chemical composition of the soil seems to have little bearing on success. The value of top-dressing during the Summer in the case of light soils cannot be exaggerated.

MANURES

IT is of no use to attempt to disguise the fact that the Rose, that most beautiful and fragrant of flowers, is a somewhat gross feeder, and it is useless to try to grow it in perfection unless its tastes in food are studied. In the preparation of the soil for the Rose-bed a liberal supply of manure must be incorporated, and surface dressings are needed at intervals throughout the year. There is a slight variation of opinion among authorities as to the relative merits of solid and liquid manures for application after the Roses are established, but there is none as regards the preparation of the soil. The first thing to be done is to find what is the natural texture of the soil itself, whether it is too light or too stiff for its purpose, and on this to base the selection of the manure to be incorporated with it. In a very stiff, cold, heavy soil it will be found best to use horse manure, but this must not be used fresh from the stable. It is only too fatally easy to injure the delicate rootlets of Roses by allowing them to come into contact with such material; the manure must have decomposed, under cover, until it has almost lost its unpleasant smell and is thoroughly "sweetened." It is essential that this process of decomposition should take place under cover, or the rain will wash out of the manure all its valuable qualities, and the remainder will be little better than rotten straw. While the manure is rotting it should be turned frequently, so that it may not heat too rapidly. This, then, is the best manure for a heavy soil, being what is called, a "hot" manure, while for light dry soils a "cool" manure,

such as cow or pig dung, is preferable, as this binds and cools the soil at the same time as it enriches it. soil which requires no special treatment from the point of view of texture almost the ideal manure for Roses is a combination one, a blend of all kinds of farmyard manure -cow, pig, horse, and poultry-collected in a heap and thoroughly mixed. This, when it has mellowed all the Summer, may be dug in in the Autumn, or spread on the surface of the soil till Spring and then dug in. Old stable litter, used while fresh, is a valuable manure for some light sandy soils. When the Roses are established the best method of feeding them-indeed obviously the only way-is either by means of liquid manures, or by top-dressings of manure sufficiently thick for the rain to wash the nourishment out of them down to the roots of the Roses. This latter seems at first sight the better of the two methods, as the fertilising material will thus be washed in more gradually and regularly, but it has the disadvantage that the air will rob the manure of many of its valuable qualities while the lengthy process is going on. Liquid manure, on the other hand, gets into the soil at once, and little of its value is wasted. Another disadvantage of the top-dressing of manure is that it is apt to harbour weeds, and at the same time prevents the proper cultivation of the surface of the soil, which should be kept light and porous over the roots. However, the top-dressing must be employed at times, and is useful as a "mulch" for protecting the roots from exposure to frost, drought or heat, and is especially necessary in this way on porous sandy or gravelly soils. Mr Foster-Melliar, who is opposed to surface manuring with solid manures as a general rule, makes an exception in such a case. He recommends that on light soils, decomposed solid manure has a very good effect when applied as a top-dressing, and acts as a mulch as well. "On hungry and porous soils, such farmyard manure, sufficiently far



MRS. W. J. GRANT
A Hybrid Tea Rose. The flowers are rosy pink, borne in great profusion.
A good garden rose
(By courtesy of Messra. B. R. Cant & Sons.)

gone for the straw to have lost all colour, or short enough to be moved with a shovel or a spade, even though it be laid in several inches thick, completely disappears in the course of a year, and hardly any sign of it except a darker colour to the soil remains." On gravelly poor soil, even without the addition of any fresh loam, a liberal top-dressing in this way, combined with good manure beneath the roots, will produce an excellent soil for standard Tea Roses and the top-dressing will allow the use of liquid natural or artificial manures as well. In such dry and porous soil some protection for the surface of the ground is absolutely necessary and a mulch of this kind is the best means.

All Rose-growers are agreed as to the value as a manure of night-soil, properly dealt with. The almost criminal waste which goes on in nearly every village, whereby tons of the finest natural manure are yearlynot only wasted, far worse-made into a vehicle of disease and death, is enough to break the heart of any real garden lover. Every garden large enough to be called a garden ought to have in it, in some convenient place, a spot set apart for dealing with the night-soil from the house, in the way described by Mr William Paul. A basin or reservoir should be dug to hold a given quantity, and at the bottom of it should be placed a layer of earth. Upon this the night-soil is thrown and covered with a sufficient layer of soil. When the pit is full, it should be covered with a good thickness of earth, and left for six months, another place being prepared for use in the interval, then broken up and mixed according to its state, blending dry soil, ashes or burnt earth with it during the operation. It will be found to have become deodorised, and after another month's rest for the soil to become well blended, it may be forked out on to the soil in the ordinary way. Mr Paul says that he "cannot conceive of any description of manure to surpass this,"

while Mr Melliar quotes the case of a Marechal Niel budded on a sweetbriar, near which a quantity of night-soil was buried during the winter. "One of the shoots from that bud, being laid along a wall, reached in the course of the Summer the length of 27 feet."

Of liquid manures the most common and perhaps the best is the washings from a farmyard or stable, preferably the former, used very weak and given frequently. The commonest mistake in using these liquid manures is giving them too strong. Dean Hole warns the Rose amateur against this danger—"let him remember this rule of application—weak and often rather than strong and seldom. I bought my own experience by destroying with too potent potations—forgetting that infants don't drink brandy neat—the delicate fibrous rootlets of some beautiful rose-trees on the Manetti stock." Unless the liquid manure is known to be extremely weak it should always be diluted, as it can do no harm if too weak, but much if too strong.

Soot-water is a good stimulant for Roses, giving fine colour to both foliage and flowers. It should be made by putting a peck of it in a sack and infusing it in about 35 gallons of water—rain-water for preference—for three days. This will be found about the right strength for using "neat," and should be given once or twice a week. This same mixture, with the addition of half a bushel of any farmyard manure, horse, sheep or cow, may be used with good results both for pot and outdoor roses, for the former diluted with two-thirds its bulk of water, and for the latter used as it is. Of pig manure, a peck is needed to the above quantities of soot and water.

and water.

A valuable manure is the contents of the housemaid's slop pails, and this may generally be used as it is, being mixed with soapy water, etc. The droppings of the poultry run are excellent used with soot, half a peck of

each being given in 35 gallons of water.

The time for applying liquid manures should be carefully regarded. At first sight it seems to the beginner that the best time for giving any liquid nourishment must be when the soil is dry, but this is far from being the case. I cannot do better than quote the explicit directions of Mr Foster-Melliar on the subject, both as regards the time and the manner of applying these manures. He points out that one may be apt to think that when the ground is dry is the time for liquid manure, but it is not so, the drier the ground and the season the weaker the manure and the purer the water that should be given. If in a dry time liquid manure is available and it is desired to put it on, it would be advisable to give a thorough soaking with pure water first. It is best on the whole to apply liquid manure when it is, fortunately, most readily available,-after a good rain. It must also be remembered that the valuable properties of liquid manure are not contained in that part which remains solid, the "dregs." These are precisely the parts which are nearly valueless to the Rose, the nourishment being in the soluble parts. Another point to be remembered is that the roots of Roses are most sensitive at their ends and that the small rootlets are the means whereby the food is assimilated, so that the manure should not be given closely round the stem of the Rose but distributed all over the surface occupied by the roots. Care should also be taken that newly moved plants may have their liquid manure very much weaker till they have made some new strong growth with large healthy "The wrong principle is the supposing that because a plant is the strongest in the bed it therefore wants the least of the liquid manure: on the contrary, it wants, because it can use, the most." No one would give an invalid the same amount of food as he would give

a strong man in perfect health and full hard work; why then should a weakly plant be treated on a different

system?

The best time of the year for using liquid manure is the early Summer, May and June, if possible after rain. If given earlier in the year great care must be taken not to injure the young and tender leaves, no manure being allowed to fall on the plants themselves. If the soil itself is good and solid manures are being used it is not advisable to give more liquid manures than these given in the Spring; after July liquid manuring should be given up, or the plants may be encouraged to grow more wood than can be properly ripened by the Winter. Winter manuring is often good, and may then be given stronger and more concentrated than in the Summer.

The manure should be put on by watering-pot, hose, or pail, the essential being that it should soak in quickly. It must not be allowed to run off, so that it will often be found necessary to put on a little at a time, coming back again and again, to ensure that all the liquid has been absorbed. "Two good rules for watering with liquid manure or plain water are — firstly, mind it is done thoroughly: be sure you give a good soaking while you are about it; remember 'an inch of rain' means nearly five gallons to the square yard, and always do a little space satisfactorily and fully rather than a mere wetting over a large extent.

"And secondly, be sure that the surface is always stirred with the hoe as soon as possible after every soaking, whether it be the natural one of rain or the artificial one of water or manure. This is most important: when the sun shines on the thoroughly soaked ground in summer it is sure to cause it to crack, often before the top is quite dry; as soon as you can work it, get just the surface dry again and as fine and powdery

as possible with the hoe, for this keeps the moisture in, while the cracks allow it to escape."

ARTIFICIAL MANURES

The subject of artificial manures is a complicated one, and needs more study than is possible for the average Rose amateur if new experiments are to be tried. will be found almost essential to the growing of really good Roses to employ some chemical aid, and many are the substances to which recourse may be had. Among the chemical manures which are used as additional food for the plant we find nitrate of soda, superphosphate of lime, sulphate of ammonia, potash, sulphate of iron and basic slag. All these are used, sometimes alone, sometimes in combination, and each has its special use. The most important of them to the Rose-grower is superphosphate of lime, and all mixtures for fertilising Roses should contain a good proportion of this. It is excellent for helping to produce good strong healthy growth, with healthy clean foliage: on damp soils this end is better achieved by the use of basic slag. Both nitrate and sulphate of potash are used to promote healthy growth, and are good to aid the production of fine buds. Sulphate of magnesia, sulphate of lime, and sulphate of iron are all employed, the last named being said to give brighter colour to the flowers. Nitrate of soda and sulphate of ammonia are both occasionally used, but not so commonly as the others named, as they both seem to promote the growth of foliage rather than of flowers. The second is the best known, as it is used by exhibitors with the intention of brightening the colour and increasing the size of their exhibition blooms. One of its chief uses is to aid in liberating other plant foods already present in the soil but not available to the rootlets of the Rose until combined with this chemical.

An excellent formula for an all-round chemical manure for the Rose is that given to the National Rose Society by Mr Tonks, and proved by subsequent experiment. consists of 12 parts of superphosphate of lime, 10 parts of nitrate of potash, 2 parts of sulphate of magnesia, 1 part of sulphate of iron, and 8 parts of sulphate of lime. These ingredients should be finely crushed and mixed together, the blend being sprinkled over the beds in spring at the rate of about a quarter of a pound per square yard, on a surface previously hoed and should be lightly hoed in. A good shower of rain to wash it into the soil is preferable to watering by hand. The manure should be kept in a dry place, but if in spite of this it cakes it should be well pulverised and crushed before scattering. At the end of May another light dressing of the manure may be given, care being taken that the foliage is not injured.

Dr Griffiths recommends as a liquid manure the following formula. Dissolve half an ounce of superphosphate of lime, and a quarter of an ounce each of sulphate of ammonia and sulphate of iron in two gallons of water, and apply this quantity to each tree once a week during May and June. Once a week during the last week in May and the whole of June, sulphate of ammonia and nitrate of soda, quarter of an ounce of each to a gallon of water, may be given. Neither of these should be continued after June, but the natural

liquid manures and soot-water returned to.

Guano is a useful but dangerous manure, its danger lying in the fact that it is extremely apt to encourage leaf growth at the expense of flowers. Half a pound of it forked in round the roots of each tree early in April will be found useful. Many other materials are used as manure for Roses, such as blood, fresh or dried; bone dust; brewers' grains; malt dust; hops; etc., but



MAMAN COCHET A vigorous Tea Rose. Light rose colour

these must be tried experimentally. It is impossible to give directions for their individual use. Wood ashes are a very old-established manure, chiefly valuable for the potash which they contain, while Mr William Paul says that he thinks "burnt and charred earth the best manure that can be applied to wet or adhesive soils," and would advise all who cultivate such to use it.

PLANTING

OF all the operations which constitute the art of Rosegrowing almost the most important is the planting. It does not matter how good the plants are, nor in how excellent a condition they arrive from the nurseryman, if they are badly or carelessly planted no amount of after care will compensate for the set-back they will have received. The time of planting is important, the best being the beginning of November, but the planting may be done at any suitable time between then and the end of March. The National Rose Society advises that in the case of the weather or the soil being in an unfavourable condition for Rose-planting during November and December the plants should be only carefully "heeled in" on their arrival, leaving the final planting in their permanent position until the end of February or beginning of March. Good open weather in the beginning of November, with the ground neither hard with frost nor sodden with moisture is the ideal moment for Rose-planting. The Roses should have been selected some time previously; in the case of a beginner it is an excellent plan to pay a visit to some large Rose garden during the flowering season, when a good selection should be made on the spot, and noted for ordering later on. The earlier the actual ordering is done the better, as not only does this ensure the plants being delivered in good time for early planting, but if the order is left till late in the season it will frequently be found that all the best young plants have been already disposed of.

Before the Roses arrive the soil should be thoroughly prepared for them, so that no time may be lost in getting them planted on arrival. The bed destined for them should be well dug to a depth of 18 inches at least, and dressed with a good supply of manure. This part of the preparation should, if possible, be finished about a week before the Roses are expected, so that the disturbed soil may settle firmly. One point must be remembered whilst preparing soil for Roses, which is that they will not tolerate a damp and ill-drained soil, so that where either soil or subsoil is heavy and waterlogged it will need good drainage before Roses will thrive in it. Too light and dry a soil is not liked by Roses, but individual soils vary so enormously that it is not possible to give any formula which will be of universal application in the preparation of a good Rose soil. As a general rule, however, it will be found that a light dry soil is improved by the addition of a good percentage of a much heavier one, and that over-heavy soils need the admixture of wood ashes or leaf mould, or a liberal dose of road scrapings. A retentive but a welldrained soil is the ideal to be aimed at.

Should the weather be frosty when the plants arrive it is best not to unpack them at once, but to place them just as they are, well wrapped in their straw covering, in some place such as a cellar or solid garden shed, which is not heated and yet is protected from frost. There they can remain safely until the frost breaks, when they should be at once unpacked and either planted or "heeled in." This latter process consists in digging a shallow trench in any convenient place, and placing the roots in it in a slightly sloping position. The roots should then be watered and the trench filled in with soil. If the plants look shrivelled up when they arrive it is a good plan to dig the trench rather deeper and wider than would otherwise be required and to lay

the plants flat down in it, watering them well, and then covering them completely with soil. They may be left for a day or two covered in, when the bark will be found to have swelled to its usual healthy condition.

The unpacking must be carefully done, as it is very easy to injure shoots or roots during the process. Should, however, any parts of the plant be found to be injured or badly bruised they should be cut off with a sharp knife. The roots must never be allowed to dry, and to ensure this only so many should be unpacked as are to be planted at a time. For the actual planting the beds should be prepared and the position of the Roses marked with small stakes. Then holes should be dug; in the case of dwarf bushes deep enough for the junction of the stock and the scion to be finally about an inch underground, in that of standards about 6 inches deep. The hole should be a foot square. The Roses should then be placed at the side of the bed, their roots carefully covered by a mat from sun and wind. The plant selected should be sprinkled with water, taken in the left hand and held upright in the middle of the hole, the roots being spread out very carefully with the other hand. The placing of the rootlets on the bottom of the hole seems a little and an unimportant thing, but it is astonishing what a difference it can make to the growth and health of the plant. These little rootlets should be disposed as evenly as possible, as far as may be without crossing, so that each has a fair space of soil to itself. Over the rootlets, when they are arranged, a sprinkling of the finest sifted soil should be laid, so that they are just covered and held in place, and on this is placed a layer of soil 3 inches deep, which must be firmly trodden in, care being taken not to bruise the roots. The hole is then filled in and again well trodden in. The importance of firm planting in the case of Roses cannot be over-emphasised, but in practice it is sometimes

found difficult where the soil is moist and sticky to tread it sufficiently firmly without moulding it into hard clods. In such a case a little light gritty soil should be used immediately under and above the roots themselves,—about a spadeful will do,—and it will be found quite easy to tread this as firmly as is required. The normal soil of the garden may be then used to fill in the hole.

Roses on lawns are planted in much the same way as those in beds, excepting that the preparation must of course be confined to the actual spot in which the plant is to be put. A hole 18 inches square should be dug where required, and the soil removed from it mixed with well-decayed manure in the proportion of I in 4 before being replaced. If the soil is found on removal to be very poor in quality fresh soil should be substituted, none of that removed being used. Roses will not tolerate competition, so that when planted on lawns the grass must never be allowed to grow to within at least 6 inches of the stems of standards, and more in the case of bush Roses.

Where the Roses to be planted are of a very vigorous kind, such as the Climbing, Pillar and Wichuraianas, a rather more roomy space should be provided. To get the full benefit of their rapid healthy growth they need more root room than do the kinds which are cut back every year, so that a hole at least 2 feet deep and 2 feet square should be dug to receive them, and the surrounding soil should be well dug and enriched with farmyard manure. Any extra care in planting such roses as these is of the nature of an investment and will continue to repay the gardener in successive years by rapid growth and free flowering. In manuring the ground for the planting of Roses it must be noted that no manure should be allowed to come into actual contact with the roots. It should be within their reach as soon as they begin to

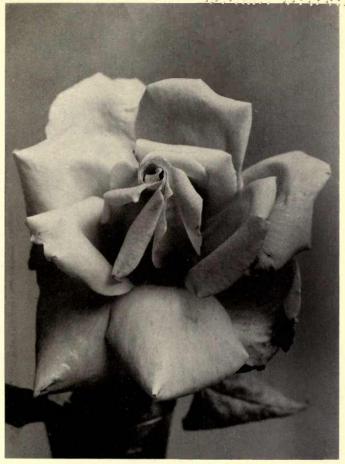
grow, but manure in contact with roots in a dormant

state will do nothing but harm.

All Roses should be firmly staked at the time of planting, and the best method of doing this so as to avoid injury to the roots of the plant is by driving in the stake in the middle of the hole before the actual planting of the Rose. Stakes are not needed in the case of dwarf and bush Roses, but any straggling shoots should be cut back so that they may not catch the wind.

LABELLING ROSES

All plants should be labelled as soon as possible after planting, and the labels should be as permanent as possible, though at the same time unsightliness should be avoided. Of course where several plants of the same variety are planted in a group or row only one of them needs a label. Wooden labels are as a rule unsatisfactory. unless treated with some form of rot-resisting dressing such as creasote, but for temporary labelling the ordinary little white-painted slips of wood are handy, and can be used with a "garden" pencil to record the name for at least a month or two. The paper labels which are supplied by the nurseryman rarely survive the first storm of wind and rain. It is best to use labels which have their own support: they should never be attached to the plant itself. If they cannot be fixed to the stake or support of the plant they should have an independent support of thick galvanised iron wire about a foot long. Many permanent metal labels may now be bought which are excellent for their purpose.



A pale cream Tea Rose. An exhibition variety

BUDDING

THE most common method of propagating Roses is that known as budding. That is the taking from a stem of a small portion of its bark, together with a bud, and inserting this beneath the bark of another Rose, which acts as foster-parent, and is called the stock. To quote that old rosarian, Sir Thomas Rivers, the operation of budding is easy to do but difficult to describe. A sharp budding-knife with a flat handle is used in the work. With this a cut just deep enough to pierce the bark but not to penetrate the wood is made longitudinally in the stock, in a clear part of the shoot, and at the top of this incision another cut is made transversely. The bark on either side of the incision is then opened with the flat handle of the budding-knife, and the stock is ready for the insertion of the bud. The preparation of the bud for insertion is very important to the success of the operation. The bud must be taken from a "ripe" shoot, that is, one which has borne, or is old enough to have borne, a flower, and this condition is easily known by rubbing it with the finger. If the prickles rub off easily the shoot is ripe. Take the shoot with its buds, cut off its leaves, leaving the footstalks about an inch in length, and then cut off a thin slice of bark about an inch in length, which should have a bud in its centre. The slice of bark to be of a proper thickness should be like a piece of writing-paper in substance. The bark need not be removed, but the bud should be inserted at once by beginning at the transverse cut and gently pushing the bud downwards. The bark on which the

bud is situated will slip in under the bark of the stock. When it is inserted the tip of the bark on which the bud is, which is technically called the plate, is cut cleanly off with the sharp budding-knife, so that it fits closely to the stock, along the transverse cut. Then bind the two firmly together with soft cotton or raffia, the cotton being preferable, so that the two parts are held closely but the bud is exposed. After about thirty days the binding may be removed, and in November, if not earlier, all the branches of the stock, except those which have been budded, must be cut cleanly off with a sharp knife and the budded shoots cut back to within two or three buds of the inserted bud. This should not be done too soon in the season. In the following May the stock will require further attention. All the buds of the stock below the bud must be carefully removed, but those above it should be allowed to grow 4 or 5 inches. They then have their tops pinched off, shoot out again, and are again and again pinched out, until at last, in the middle of June, they are finally removed. The operation of budding is best done in the period between June and September, but if done early in the season care must be taken that the shoots are properly ripe.

SOWING ROSE SEED

THE pods or hips of Roses which it is hoped to multiply by means of seed should be left on the plants until they are about to drop. They should then be picked with a small piece of stalk attached to each and the ends of the stalks should be inserted in sand which must be kept damp until the following November or December, when the seed is to be sown. The most favourable conditions for sowing Rose-seed are afforded by a greenhouse with a temperature that does not fall below 50 degrees at night. Mr Easlea advises that in order to prevent the soil from ever becoming dry a small 60-pot should be placed inside a 48-pot. Bring the two rims level by means of crocks beneath the smaller pot, and fill up the intervening space with old peat broken up into small particles. Leave an indentation of about half an inch so that water can be poured on to the peat without wetting the soil. The small 60-pot should now be covered at the bottom with about one-fourth its height of clean broken crocks, and filled to the top with a compost of loam, leaf soil about a year old and well rotted, and silver sand, in the proportion of about one part each of the two first and half a part of the sand. This mixture should all be passed through a very fine sieve, allowed to stand for a while to air, and the pots should then be filled with it, the soil being fairly firmly pressed down with the fingers. Only three seeds should be sown in each pot, and as one pod will often contain as many as thirty seeds, a good supply both of pots and soil will be needed. Now break the pods with a hammer and take out the seeds. They will be found to be damp with an acid substance, and this must not be allowed to dry. Thousands of Rose-seeds have been destroyed by having been allowed to become dry. As the seeds are picked out take three of them and push them down with the blunt end of a lead-pencil to a depth of half an inch. Cover the surface with sand, and record the name of the parent or the cross on a label pushed down the side of the pot, and when several pots are complete begin to water with a can with a fine rose. Now stand the pots on slabs of slate or shingles as near as possible to the glass. Each fine bright morning gently spray over the surface of the pots with a fine syringe. seedlings should appear about March, and they will then require the most careful nursing. Every drop of water that may lodge on the tiny leaves after they have been sprayed must be removed with a camel-hair brush. Get ready some compost as recommended above, and clean thoroughly a number of thumbpots. As soon as the seedling appears take a sharp label or other strip of thin wood and push it into the soil, lifting out the seedling. Pot this off into a thumbpot, placing the latter inside a larger pot to keep it from drying off too rapidly. care is needed to avoid breaking the tip of the root. If lifted and potted before making a leaf the little plant will not flag at all. As it progresses it should be potted off into larger and larger pots, which should always be placed as near the glass as possible. In June it can be hardened off, and planted in the open in July, unless room can be found for it indoors. The latter is the best plan, and is that adopted by all practical growers. By the Autumn the seedlings should be quite strong plants and will bloom. Even in the first year buds may be taken from some of them, and may be budded on to briars in the open. At least one bud should always be secured, however tiny, as the plant will often die after

having flowered.

Do not be discouraged and throw away the seed-pots for at least a year, even if no seedlings show. Many seeds will take over twelve months to germinate.

HOW TO STRIKE ROSES

Most varieties of Roses may easily be propagated by cuttings, but some hard-wooded kinds, such as the Moss Roses, present difficulties. Green or soft-woodedcuttings root easily enough, though this sort of cutting is employed somewhat rarely as they are not on the whole so satisfactory as cuttings taken from ripened wood. These green cuttings must always have some of their leaves preserved. The method of taking them is as follows. Roses in pots are placed in a warm greenhouse in February, and when the shoots have grown to 2 or 3 inches in length they are torn off, their heels trimmed with a knife and some leaves removed from the base. The cuttings are then planted in small pots, and placed at once under bell-glasses in a pit with a bottom heat of about 60 to 70 degrees Fahrenheit. They will require careful watering, and will take about From that time onward they are a month to root. gradually hardened by admitting air, after which they should be re-potted and put in a cool frame until May, when they may be planted out in suitable soil.

It is, however, usually simpler and better to take cuttings from ripened wood, preferably such as is furnished with leaves. Such cuttings readily root in the open air, at any time during the Summer and Autumn after the Roses have bloomed. Monsieur Chas. Grosdemange has described in detail the different operations which he finds most satisfactory in making cuttings of Roses. The soil used in striking Roses should be fairly light, of such a consistency as just



BESSIE BROWN Λ creamy white Hyprid Tea. Very fragrant

suffices to hold the cuttings firm, and yet allows free and perfect drainage. M. Grosdemange advises a compost of two-thirds fine river sand, slightly admixed with earth, and one-third of a mixture of leaf-mould and wellrooted manure. As a matter of actual fact the addition of the leaf-mould and manure is not necessary, pure sand with a little clayey soil in it is as good as any mixture. The bed is prepared thus. A situation is chosen, preferably in a border running east and west, with shade enough to prevent the sun striking on the bell-glasses used to protect the cuttings. An even trench is made in this bed, its sides being kept square by means of thin planks on their edges, and the space filled in with the prepared soil, the whole being raked level. The cuttings should be taken any time between the end of the blooming period and the first frosts, as the leaves of the parent plant must be strong and healthy. M. Grosdemange limits the time to between the first fortnight in September and the first fortnight in November, but this need not be made a hard and fast rule. A shoot of medium thickness should be chosen, and preference should be given to shoots with a heel, these generally having a number of latent buds at their bases which are likely to strike out into good shoots. The cutting should have four eyes, and all but the two top leaslets should be removed, two of the eyes being under the surface of the soil when planted and two above. Should the leaves of the parent bush have fallen before cuttings can be made, the shoot will strike almost as well without, and should be in all other respects the same as that with leaves. Before planting the Rose shoots the ground must be trodden quite firm, so as to hold the cuttings quite securely, and should then be levelled carefully to exactly fit the base of the bell-glasses. Holes are made for the cuttings with a small dibber about the size of a finger, and about an inch apart, and

the cuttings planted firmly, with earth pressed hard round their bases. This firm planting is of the utmost importance. A plentiful watering immediately on planting is also very essential to success. The bell-glasses are then put on, and are subsequently removed as seldom as possible, the great thing being to preserve the plants from evaporation, and the consequent drying of their bark. Every cutting whose bark shrivels up is practically useless. At the beginning of the time, that is at the end of September, the sun is strong enough to make it imperative to completely shade the bell-glasses, but as the weather grows cooler this precaution is less necessary. For the first fortnight M. Grosdemange recommends that the glasses be shaded with matting, and afterwards, until the end of October, when shade is no longer required, with hurdles. Inspect the cuttings from time to time, and remove fallen leaves and weeds. When the cold weather sets in the glasses will need an almost complete covering with dry litter, only the tops being left uncovered, and even these should be covered at night with mats. Whenever there is a mild spell during the Winter give them as much light as possible. In the last few days of February, when the hard winter is practically over, the litter may be removed, and air given to the cuttings whenever the sun shines; and in the latter end of March, when the cuttings have struck root and their buds are beginning to shoot, the glasses will only be needed at night. In the first fortnight of April the young Roses are planted out into pots in soil similar to that of the striking bed but slightly heavier, and stood in a close frame for from 2 to 3 weeks, which gives the plants a fair start in their individual existence. At the end of April they will be found fit for the open ground.

EYE CUTTINGS

A QUICK, simple and often effective method of taking Rose cuttings is the following, which was described some

time ago in the Gardener's Magazine.

Shallow earthen pots are used, well drained at the bottom with broken crocks and filled with a compost of leaf mould and white sand, the top half-inch being pure sand alone. Cut from your Roses well-formed buds such as you would select for budding, but do not remove either the wood or the leaf. Plant the buds in such a way that the bark is entirely covered with soil, but the bud is above ground, and when the pan is quite full of buds, the leaves touching each other and pointing upwards, water them lightly on the top and cover the pan with a bell-glass. When the buds begin to send out rootlets they may be repotted singly, and should then be undisturbed so long as they have room in the pot for their roots. They may be planted straight out into the border when well established, so long as some shelter is provided in severe weather, or if the season is too far advanced for this they may be wintered in a cold frame and planted out in the warmer weather. This method of propagation has the two great advantages of being both inexpensive and rapid, whilst it also secures good plants on their own roots. Many of the stronggrowing sorts of Rose do extremely well grown in this way, especially the Climbers and Ramblers, whilst the annoying possibility of the killing of the scion by the stock is of course rendered out of the question. the open air the usual months for this process are October and November. The following list of Roses includes many of those found suitable for growing on their own roots, from cuttings, and among them are many old favourites: Gloire de Dijon; Dorothy Perkins; Crimson Rambler; Ulrich Brunner; Fru Karl Druschki; William Allan Richardson; Mrs John Laing; Duke of Edinburgh; Caroline Testout; Gruss an Teplitz; Mrs W. J. Grant, and Killarney.

PRUNING

THE necessity for pruning Rose-trees is due to the natural manner of the plant's growth. The Rose does not, as some trees do, grow steadily upwards, merely increasing the length of its twigs, but makes new wood yearly from side buds, usually low down on the branch, or even from the base of the plant. It follows from this that the strong new shoot deflects the nourishment from the wood above it, so that this latter first ceases to bear flowers freely, and eventually dies. The first season of growth is the best for flowering. The second year is not so good, and from that time on the old wood becomes almost valueless. It is thus obvious that to obtain the greatest number of fine flowers from a Rose-tree it is necessary every year to remove such wood as is past its prime so as to concentrate all the vitality of the plant in the new young shoots.

The method of removing these old branches, as well as the treatment given to the new shoots, varies both according to the variety of Rose and the result required. For instance, where Roses are desired to cover a trellis, wall or pergola the old wood only should be removed, the young wood being left its full length, but where fine flowers or shaped trees are required a different method must be adopted. Often a Rose-tree will become over-crowded with young wood, so that if left alone half of the shoots would choke each other, rub, or in some way be damaged, and in such a case the aim of the pruner should be to so thin out his shoots as to allow the utmost freedom for light and air to reach all

his tree, and that each shoot may have room for its fullest and best development. The shape of the tree or bush has also to be considered, and much is done in this way by the selection of the bud to which the shoot is cut back, its position on the shoot being noted, whether on the outer or inner side, so that when the bud makes growth in the Spring the resulting shoot may take its proper place in the plant. Technically the operation of pruning is divided into two sections, thinning out, which means the removal of dead wood, overcrowded shoots, and weakly ones; and pruning proper, which means the shortening of the shoots which are selected to bear the next year's blooms. One of the chief dangers for the beginner is that he is apt either to cut too much or too little from his selected shoots, as this operation is entirely governed by the result desired. For example, it is difficult for the beginner to realise that in order to grow exhibition roses it is often necessary to cut back the plants nearly to the ground. This seems to him to risk the life of his most valuable plants, whereas the fact is that the harder such plants are cut back in the Spring the stronger and healthier will be the new Summer growths. The most frequent mistakes made in pruning Roses are first, insufficient thinning out, secondly, cutting back too severely those varieties of Rose which require little shortening, thirdly, cutting too little from those sorts which need severe pruning, and lastly, cutting out too few shoots and shortening those left to a uniform length, so that the tree looks as if it had been clipped with shears. For ordinary garden use as decorative plants Roses do not need very severe pruning, it is often enough to merely remove dead wood and crowded shoots, leaving all new wood to make its full growth. This is especially true of climbing Roses, and those used on pillars, arches, and pergolas. In deciding this point the variety of the Rose must be taken



WEEPING STANDARD OF DOROTHY PERKINS

into account. When a shoot is cut out, it should be cut clean out to its starting-point on the parent branch or the base of the plant, whereas when pruning the shoot it should be only cut back to a certain bud first selected, from which the new growth will spring, the aim in doing this being both to renew the wood and to keep the plant in a good shape. It must be remembered that as the bud points so will the shoot grow, so that as a general rule a bud pointing outward and upward should be chosen, so that the resulting shoot may take its proper place. It is during the first two or three years that a Rose-tree makes, as it were, its framework, so that it is in these years that the greatest care must be taken over the training of its shape.

Autumn-planted Roses will need pruning in the following Spring, while if planted in the Spring they should be cut back at once. At this time they should be very severely pruned, being cut down to within 3 or 4 inches of the ground, even the climbing sorts which afterwards need little or no pruning being cut down to

a foot high.

When pruning Roses for garden decoration, that is to say, when plenty of good flowers are desired rather than a few perfect ones, the following rules will be found to apply to all varieties. All shoots which are either dead or dying, together with all unripe and sappy wood should be cut clean away from the base, and in pruning the shoots meant to bear flowers in the current year they should be cut back to an outward pointing bud. The Roses called "summer flowering," which class includes all those which bloom only once in the year, will be found to need thinning and training rather than pruning, and their shoots should be shortened according to their age, the last year's shoots being left almost untouched, the two-year-olds shortened a little, and the three-year and older wood cut back sternly. Too

hard pruning of the perpetual-flowering Roses—those which flower twice in the season—will not damage them so much as it will the Summer flowering kinds, but will defer the blooming season. Climbing Roses should only have the oldest wood cut out, and the new growth tied in its place; and this should be done as soon as the Roses have finished flowering, the shortening, if any, of the shoots being done in the Spring.

The instruments needed for pruning are simple and few. A hone on which the tools may be kept keen, a pruning-knife, a small saw for old hard wood, a pad on which to kneel, and a pair of secateurs. Gardening gloves will be needed by all but the most horny-handed

gardeners.

There is much division of opinion among gardeners as to the relative merits of the knife and the secateurs for pruning Roses, and the majority of Rose-growers are decidedly against the secateurs, but there has lately been a slight revulsion of feeling in favour of the latter instrument. No old-fashioned rosarian would be seen for a moment using anything but knife and saw on his cherished trees, but the modern is beginning to believe in the more complicated instrument. Mr Darlington, in a paper contributed to the National Rose Society, examines the relative merits of the two in detail, and on the whole gives his verdict in favour of the secateurs. As he says. a clean cut with a sharp knife when the shoot is firmly held below the cut, has no doubt certain qualities in some ways preferable to those of the cut made by the secateurs: the cut of the knife causes practically no crushing of the wood; the cut is smooth and heals rapidly, it may be made closer to the bud intended to be left to grow than is possible with the secateurs and thus no dead wood need be left above the growing shoot; the bark round the cut is but little injured by the cut of the knife, and may in favourable circumstances, and if sufficient time is given, gradually extend so as to cover up the cut surface of the stem, and to heal the wound over altogether. This may be seen sometimes in standards where a branch of the stock has been cut off above the junction of the stock and the scion. The knife cut is, moreover, sloping and not directly across the stem, and is therefore less liable to retain water on its surface, which might injuriously affect the plant and leave it more open to the attack of frost or decay.

The advantages of the secateurs are of a different kind. They mean to the ordinary amateur a saving of time, trouble, and laceration of the hands, the saving of time in particular being very considerable. Mr Darlington estimates that to prune a bed of Roses with the secateurs takes from one-third to one-half as long as pruning with knife and saw. Moreover the time and skill necessary to keep the knife constantly sharp is to a great degree dispensed with. That secateurs require much less skill than the knife seems to be pretty generally admitted. It is easier with secateurs to cut at the exact point desired, while old shoots from the centre of the tree can be fairly easily removed with secateurs by an amateur, while to remove them with the knife without injury to surrounding growths is no easy task even for the skilled person. The mere cutting through of a thick branch is in itself no easy job with the knife alone, the leverage given by the secateurs being of considerable assistance.

All these considerations of personal convenience, time, and trouble may perhaps be thought small when weighed against the success of the pruning operations, but it is by no means certain that, even from the point of view of efficiency, the knife has much advantage over the secateurs. Even when done by an expert the act of cutting with the knife through a thick piece of wood is not unlikely to badly strain the plant, and has been

known to even tear the junction between the branch and the main stem or stock and scion.

If the tree is so formed that the branch cannot be very firmly held immediately below the cut the strain may disturb the roots or strain the stem in a very undesirable way. Where the tree pruned is a "maiden," that is to say, recently budded or grafted, there is a considerable risk of pulling the scion right out of the stock by the pull on the shoot. Of course by the use of secateurs this strain is entirely obviated, the cut being across the stem, with no strain either up or down.

The time for pruning Roses varies according to variety. The hybrid Perpetuals, both dwarf and standard, together with the hybrid Teas, should be pruned in March; dwarf and standard Teas and Noisettes in April, while the climbing varieties of all these should, as before advised, be thinned out immediately after

flowering and pruned in March.

It is impossible in the small space at my command to give detailed instructions for the pruning of the many hundred varieties of hybrid Perpetuals, hybrid Teas, Teas and Noisettes, for garden and exhibition. I can only refer the reader in search of such information to the excellent little handbook issued by the National Rose Society, where instructions are given for pruning every well-known Rose. The treatment of some of the classes is, however, rather simpler to explain. The climbing kinds of hybrid Perpetual, Teas and hybrid Teas are treated in much the same way They are allowed to grow naturally, the only attention they need being the removal of the dead wood and enough of the shoots to prevent the plant from becoming over-crowded. Should the base of the plant tend to become bare, as sometimes happens with an old plant, one or two of the best of the shoots from the base should be retained and

shortened to fill up the bare part. The thinning should be done in Summer, as advised above, and the pruning,

if required, in March.

The Moss Roses should be pruned in February or March, and should have all dead wood removed and all old shoots thinned out. The new base shoots together with the best lateral shoots of the two-year-old wood should be retained, and shortened to some four or five buds, the bush when finished being $1\frac{1}{2}$ to 2 feet high, or in the case of stronger growers a little higher.

The Provence Roses are pruned in the same manner as the foregoing, and at the same time of year, but they should be cut a little shorter, the bush never exceeding

2 feet high when finished.

Miniature Provence Roses are pruned in February and March, thinned out and cut down to within 5 or 6 inches of the ground, the essential being that the plant shall be

well shaped when in bloom.

The hybrid China Roses should be pruned early in March, and as they are excellent for large bushes they may have their shoots left from 4 to 6 feet long. The side shoots on the two- and three-year-old wood should be cut back to three or four eyes, and the old wood thinned out.

The French and Damask Roses are of two kinds, those of which the type is "Lady Curzon," and those like "Rosa Mundi." The former class is best treated as pillar Roses or tall bushes, and should therefore be left long, the shoots merely needing thinning out, the best side shoots and the best one- and two-year wood being kept. The second class should be similarly treated, but should be kept down to about $2\frac{1}{2}$ or 3 feet high. Prune early in March.

Rosa Alba makes a good bush or bushy pillar, and should have all the weak wood severely cut out. These Roses produce their finest flowers on the side shoots

from ripened wood, so that these should be selected and cut back to about 9 inches or a foot long. Rosa Alba

should be pruned in early March.

The Scotch Briars should be pruned in March. They should be hardly touched, needing very little pruning. The healthy young suckers from the base should be shortened, so as to clothe the stem, and the worn-out wood and very weakly shoots removed. About 3 feet

is a good height for these Roses.

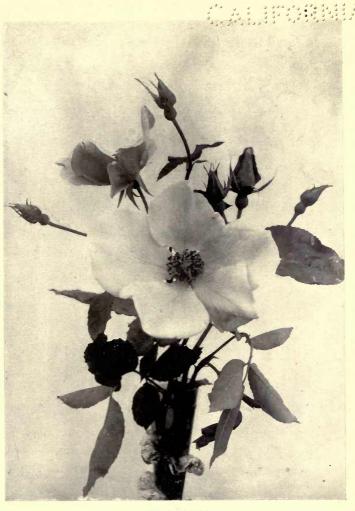
The Austrian Briars are also pruned in March, and these need rather different treatment from the preceding Roses, as in their case much of the bloom is produced on two- and three-year-old wood. In such a case as this only the dead wood should be cut out, and one- two- and three-year wood left. One of the Austrian Briars, Soleil d'Or, bears its flowers on the shoots of the current year's growth, and may therefore have its shoots left about 2 feet long, and may be more severely pruned. It should not be much thinned or much of the season's bloom will be lost.

The Ayrshire Roses should be pruned in February; or rather they should be thinned and cleared from dead wood, as they need no actual pruning, and this applies also to the hybrid Noisettes and hybrid Musks. Thin out the older wood only, and arrange the new wood so

as to keep the plant well shaped.

The hybrid Bourbons bloom on old wood, so that much of the three- and two-year-old wood should be left, together with fairly long lateral shoots. The best of the shoots from the base should be retained, and the bush left about 4 or 5 feet high. These are pruned in March.

The Banksian Roses require no pruning at all for the first three years, as the blooms are produced on the lateral shoots from ripened wood. In the case of old plants it may be necessary sometimes to cut severely



 $\begin{array}{c} {\rm IRISH\ ELEGANCE} \\ {\rm A\ single\ flowered\ Hybrid\ Tea.} \end{array} \ {\rm Apricot\ coloured,\ the\ buds\ crange\ scarlet} \end{array}$

back to make them shoot out freshly from the base, but this is not a regular occurrence. They should be

pruned in April.

The Boursaults are pruned in March, and require little thinning. They are very vigorous growers, and throw up long firm shoots from the base which should be left at their full height. The older wood should be shortened to the height required, and the side shoots left from 6 to 10 feet long. They are treated in a manner very similar to the Sweet Briars, including the Penzance Briars, the latter being pruned almost exactly like the Boursaults. Lord and Lady Penzance are not quite such sturdy growers as the rest, and should not exceed 6 feet in length. The Sweet Briars are weaker again and should have all weak and naked shoots cut away, leaving the plant about 4 feet high. All these Briars will need some thinning, and if used for hedges the long shoots should be pegged down to fill in the base of the hedge. They should be pruned in early March.

The Sempervirens class should be pruned early in February, and need almost the same treatment as the Ayrshires. The lateral shoots should, however, be shortened, as they are more slender in the stem. Where these Roses are planted as rambling plants on banks, for which they are eminently suited, they may be left to run almost wild and untouched.

The Multiflora Roses need rather diverse treatment according to variety, but as a general rule it may be taken that as they bloom mostly on the tips of the branches this habit must be regarded and if possible counteracted in pruning. This is done, when the plants are grown as pillars or climbers, by shortening some of the weaker one-year-old shoots, the stronger ones being left to their full length. Where they are grown as a hedge they hardly need this, as the tops will fall over

nearly to the ground and thus fairly cover the plant with bloom. March is the time for pruning these Roses. The various Species, with some exceptions, need practically no pruning. They are best left to run fairly wild, only some of the dead wood being removed yearly. Where the tips of the young shoots have been nipped by the frost they should be cut back to well-ripened wood.

The Chinas need thinning rather than pruning, but if the base of the plant is getting bare some of the strongest growth should be cut back so as to throw some of the strength of the plant into new shoots from the base. This should be done in March, as should the pruning of the

Bourbons.

These latter are excellent for bushy standards and bushes and do not need very hard pruning, a good deal of the best lateral-bearing shoots being retained as they bloom largely on the lateral shoots from ripened wood. They want vigorous thinning. The Noisettes should be pruned in March, and will be found to need the cutting away of old unsound wood, though as much as possible of the sound old wood must be left, as the flowers are produced on laterals from it. Diseased wood, new or old, should be sternly removed.

The little dwarf Pompon Polyantha Roses ask for very simple treatment, merely needing to have the old flowerstalks cut away in March, leaving the plant to break

again from the base and from the upper buds.

The Rugosas should be pruned in February, and an excellent method of doing this, though at first sight rather heroic, is to cut the whole plant each year nearly down to the ground. They then bloom rather late but freely. If preferred, the best of the strong young suckers from the base may be left about 4 feet long, so as to make a good bush, when new growth and flowers will be produced from the heads of the branches. They always break freely from the base.

The Wichuraiana and its hybrids are pruned in March, and need slightly differing treatment according to whether they most resemble their Wichuraiana parent or the Tea strain. Those which, like "Dorothy Perkins," resemble the original "Wichuraiana," need well thinning and very little pruning. They bloom on the young growths, while those with more of the characteristics of the Tea Rose, such as "Paul Transon," bloom more on the old wood, which must therefore be left more freely, and the laterals thinned out and cut back.

The Perpetual Scotch Roses merely need trimming in March to keep the bushes in shape, as they flower as well with or without pruning. They make good bushes or half standards, and as such will be found to require enough cutting out and shaping to keep them renewed.

Standard Roses are usually the stronger growing sorts, or should be. Standard hybrid Teas and hybrid Perpetuals should be pruned exactly according to the same rules as govern them when grown as dwarfs, but it is essential that the centre of the plant should be kept well open. The shape of a standard Rose also gives it much of its beauty, and must therefore be kept in mind while pruning, as if the shoots are left too long the head will become ragged-looking and ugly. The standard differs from the dwarf form in that it does not produce shoots from the point of union of the stock and scion, so that in pruning, the last year's shoots should be cut back nearly to the point pruned to the previous year, though in the weaker growing Teas no harm is done by cutting back almost to the union of the stock and scion. All diseased or weakly shoots should in all cases be cut away. Weeping standards should have their shoots thinned with an eye to the shape of the plant, the long drooping shoots being retained as far as possible, as it is on the side shoots from these that the flowers are borne. Special pruning is required for those Roses which are being pegged down, and only the strongest growing kinds should be used for this purpose. A few of the best, longest and best ripened shoots, about three or four, not more, to a plant, are selected, cut to the desired length, and carefully laid as nearly horizontal as possible, the ends being pegged down. All other shoots are then cut right out, when the selected shoots will bear flowers along their whole length. When the strong shoots appear from the base in Summer the best are allowed to grow, and in the Spring the old shoots which have flowered are removed, and the process repeated with the young shoots left from the Summer. Good Roses for pegging down are Mme Isaac Pereire, Gruss an Teplitz, Mme Jules Gravereaux, Frau Karl Druschki, J. B. Clark,

and Zephirine Drouhin.

In the late Summer or early Autumn, when the Summer flowering is over, many of the stronger Roses, especially the climbers, are benefited by a judicious pruning. All the Summer flowering Roses—those which flower only once in the season-should have all the wood which has flowered cut right away, as this pruning will encourage the young growth from the lower parts of the plant, and will give it a chance of ripening well, ready for flowering next year. These young shoots should be allowed free growth without trimming or shortening until the Spring, and should be protected from breakage by winds by being lightly tied in place. Summer Roses grown as bushes should be treated in a similar way, but not so drastically, as the young growth is as a rule not so vigorous; and all the best of the shoots which have flowered should be left, at least provisionally. The Briars also do not need very vigorous treatment, the young growth not being very strong, and if they are thinned thoroughly once in three or four years it will be often enough. Briars should never be pruned in the ordinary way by cutting

back the shoots, and their young shoots should not be

tied until thoroughly ripened.

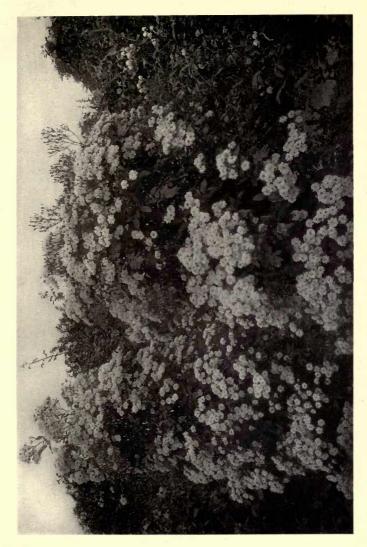
All the strong growing hybrid Perpetuals and the strong hybrid Teas which resemble them will be the better for attention. Any straggly old wood with weak new growth should be cut away, and four or five strong new shoots selected and left. It must be remembered that these Roses will flower again later in the year, but it will be found that an astonishing amount of old wood can be removed without interfering with the late flowering season.

OLD-FASHIONED ROSES

The Cabbage or Provence Rose

THE Provence Rose, Rosa Centifolia, is supposed to have been introduced into England at the end of the sixteenth century, and is described by Parkinson as much resembling what he called the "great double damaske Province or Holland rose," "the difference being not so very great; the stemme or stocke and the branches also in this seeming not so great but greener, the barke not being so red; the leaves of the same largenesse with the former damaske Province rose. The flowers are not altogether so large, thicke and double, and of a little deeper damaske or blushe colour, turning to a red rose, but not coming neare the full colour of the best red rose, of a sent not so sweete as the damaske Province, but comming somewhat neere the sent of the ordinary red rose, yet exceeding it. This rose is not so plentifull in bearing as the damaske Province." But anyone who can express dissatisfaction with the fragrance of the old Provence Rose must be very difficult to please. This is the Rose par excellence of old English cottage gardens, and even now, with all our hybrid Perpetuals and Teas, it should, wherever there is space, be grown for its scent, its colour and its associations. Like most of the old-fashioned Summer-flowering Roses it needs a deep rich soil. It is best grown on its own roots and it should be severely pruned. Every shoot should be shortened to three or four buds.

Of the miniature or Pompon Provence Roses the



THE GARLAND, CLIMBING CLUSTER ROSE (By courtesy of Messrs. B. R. Cant & Sons)



varieties De Meaux and Spong are the best. These little Roses have been favourites with children for generations. They are earlier than most other Roses, but they are soon over. The rosy lilac flowers of Spong's Rose are good in the foremost row of, or for an edging to a bed of Roses.

The Double Yellow Rose

The Double Yellow Rose is reputed to have been introduced from Constantinople by Nicholas Lete, a London merchant, at about the end of the sixteenth century, that is at about the same time as the introduction of the Provence Rose. All the plants which he brought to England, however, died, and it was left to another London merchant, a few years later, to reintroduce the Rose, this time with success. The plant grows luxuriantly in almost any rich soil, but only rarely can its blooms be made to reach perfection. The buds often appear freely enough, but they have a habit of falling before the flower is fully developed. For this reason it is almost gone out of cultivation, and is now very rare indeed. The single-flowered parent of this Rose is a native of a dry warm climate, and it is interesting to read in Hanbury's "Complete Body of Planting and Gardening," published in 1770, that "in the parching and dry summer of 1762 all my double yellow roses, both in the nursery lines and elsewhere, in the hottest and most southern exposures and dry banks, everywhere all over my whole plantations, flowered free and fair. Scarcely one among them could be found with a shrivelled leaf; nor did I see any that had the appearance of the grub taking their sides; but all in general blew as fair, as double, and every whit as complete, as the cabbage Provence rose. I never observed the blow to be so generally fine before, and it is what seldom happens with us." Still, the yellow Provence Rose is rarely if ever to be found listed in any of the nurserymen's catalogues of the present day.

The Moss Rose

The Moss Rose is believed to be a descendant of the Provence Rose. It was introduced into England at about the same time as the Provence Rose, though its actual history is not fully known. The flowers of the old Moss Rose are much like those of the common Provence Rose, though their foot-stalks are stronger, and the flowers consequently more upright. The mossy growth about the calyx is continued far down the flower-stalk, and is much more obvious when the flower is in bud than when it is in full bloom. The Moss Rose does not seem to have appealed to every gardener, for Hanbury, writing in the eighteenth century, said "it seems to owe its excellence to the mossy substance growing about the foot-stalk and calyx of the flower, but were this as common as the other sort of Province roses, that would be looked upon as an imperfection; for though this flower naturally is possessed of the same agreeable fragrance as the other Province roses, yet this mossy substance has a strong disagreeable scent, is possessed of a clammy matter and is liked by very few." I venture to differ.

Few things are more beautiful than a Pink Moss Rose showing through its mossy covering, and so far from the scent of the mossy calyx being disagreeable, to me, at any rate, it may be ranked with, though below, that of the Sweet-briar. There are several beautiful varieties and hybrids of the Moss Rose. The White Bath and Blanche Moreau are perhaps the best of the white, though Comtesse Murinais is also a very handsome white variety, much resembling a Damask Rose in its

foliage and habit. Then there is the Perpetual White Moss, which is vigorous and very mossy, and blooms in Autumn as well as summer. The old Black Moss and Nuits d'Young are two dark-crimson flowered species. both Summer bloomers. Moussue presque partout bears bright pink Roses, and very mossy leaves and branches. Angelique Quetier is also a very mossy kind, bearing pale lilac-rose flowers, and Œillet Panache is a vigorous kind, bearing Roses striped white and red. These last named are all Summer bloomers. Of the Autumn flowering or Perpetual Moss Roses may be named, in addition to the Perpetual White Moss, Salêt, which has bright pink flowers, very full and well shaped, shaded to fainter blush at the edges; Deuil de Paul Fontaine, of a deep red, inclining to purple, shaded with lighter red; Madame Edouard Ory, with large flowers of a bright pink carmine, and James Veitch, which is perhaps the best dark Moss Rose, of a deep violet crimson.

The Moss Rose is best grown on its own roots, and needs a rich light soil, well cultivated. To form fine masses of flowers and foliage pegging down should be practised, the shoots being secured with hooked sticks as Carnations are layered, when they will shoot luxuriantly from the pegged-out branch. They, like the Provence Roses, require severe pruning, and to secure a succession of flowers it is a good plan to prune half the shoots in about October, leaving the remainder to be shortened the following May, pruning closely in each case. In this way the season of flowering may be prolonged by as much as three weeks. In late Autumn the beds should have a good dressing of manure and in the Spring the surface of the soil should be lightly stirred with a fork. The Moss Rose is more successful when grown as a low bush, from 2 to 3 feet in the stem, as the stem thus increases in strength and thickness as the head becomes heavier, and better bears the

increased weight of the plant. In very heavy clayey and cold soils the Moss Rose often succeeds better grown on the Dog Rose stock than on its own roots.

The Maiden's Blush Rose

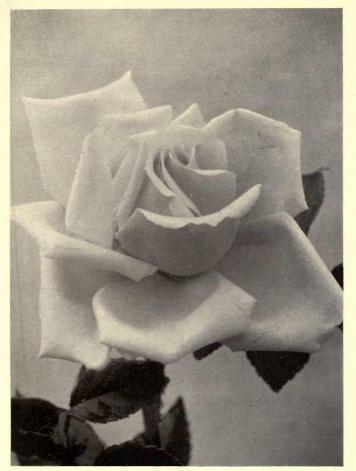
The Maiden's Blush Rose is a variety of the Old White Rose, Rosa Alba, which was introduced into England probably in the fourteenth or fifteenth century. It is a beautiful variety, shaded with a faint salmon pink at the base of the petals and at its heart. Hanbury waxes very enthusiastic over it. "Such a profusion of noble sorts of flowers does the Rose afford us, that when we view one we think that the best, when another, that that excels. We may gaze with admiration on most of the before-recited sorts, and shall have reason for astonishment in what are to follow; but surely we may pronounce of this, that it is exceeded by no Rose; neither are we affected by any, more than by the sort before us. They are produced in very large clusters, and each Rose is as large as the Common Double White. Their fragrance is of the same nature with that sort, and they are every whit as double and large. As to their colour, can we justly form an idea of the finished beauty of a young lady, who is every way perfect in shape and complexion and whose modesty will give occasion (without any real cause) for the cheeks gently to glow? Form to yourselves an idea of such a colour at that time, and that is the colour of the Rosc we are treating of, before it has been too long exposed to the air. A Rose properly termed the Maiden's Blush, and which all cover and admire."

The Red Damask Rose

The Red Damask Rose is one of our oldest garden Roses, and is praised by Parkinson as having the sweetest scent of all Roses. The Damask Roses are all perfectly hardy, and having leaves of a strikingly light green and a very vigorous and beautiful habit, they are excellent for planting among other Roses in masses, or to be placed against a background of darker shrubs. The description of the Damask Rose, Rosa Damascena, given by Parkinson, is a good example of his simple clear style of description, and will still serve as a picture of the Damask Rose as we know it, though its varieties have increased under modern cultivation. He says of it: "The Damask Rose bush is more usually noursed up to a competent height to stand alone, (which we call Standards) then any other Rose: the barke both of the stocke and branches, is not so fully greene as the red or white Rose: the leaves are greene with an eye of white upon them, so like unto the red Rose, that there is no great difference betweene them, but that the leaves of the red Rose seem to bee of a darker greene. The flowers are of a fine deepe blush colour, as all know, with some pale yellow threds in the middle, and are not so thicke and double as the white, not, being blowne, with so large and great leaves as the red, but of the most excellent sweet pleasant sent, far surpassing all other Roses and Flowers, being neyther heady nor too strong, nor stuffing and unpleasant sweet, as many other flowers." He returns to the praises of this Rose when he speaks of its relative, the "Great double Damaske Provinc or Holland Rose," of which he says that "many doe thinke it as good as the damask, and to that end I have known some Gentlewomen have caused all their damask stockes to bee grafted with province Roses, hoping to have as good water, and more store of them then of damaske roses; but of my opinion it is not of halfe so good a sent as the water of damaske Roses: let every one follow their own fancie"

WILD ROSES

As in the case of many other florists' flowers, we have, in cultivating the Rose and selecting and re-selecting varieties in accordance with more or less artificial standards, sacrificed something of the charm, grace and delicacy of the original wild species from which our varieties are descended. A large number of these species are well worth cultivating, especially where they can be allowed plenty of room for full and free development. Our own hedges and fields furnish some of the most beautiful of the wild Roses. Both the common Dog Rose and the Field Rose, with their arched branches and delicately coloured fragrant flowers, may well serve to give the exhibition florists an idea of the real beauty of Rose growth. The Macartney Rose, Rosa Bracteata, is a beautiful evergreen species, a native of China, and produces abundance of creamy white single flowers late in the season, the flowers being followed by large orange-red fruit. Being rather tender, the Macartney Rose is best grown against a south wall. Rosa Microphylla is another Chinese species, also evergreen, with very small leaves, their edges fairly toothed. It bears double flowers, the colour of which varies in the different varieties under cultivation, but is usually rosy red or white tinged with rose. Both this Rose and the Macartney Rose require some pruning in April, the larger shoots being checked by pinching out their soft tips, while weak shoots are removed altogether. Rosa Kamtschatka represents another group of wild Roses, to which also belongs the Hedgehog Rose, Rosa Ferox, from the Caucasus. Both these



WHITE MAMAN COCHET

species are low-growing bushes, with thick branches, closely covered with substantial spines. The flowers are of a deep red colour. The Japanese Rose, Rosa Rugosa, is a near ally of Rosa Kamtschatka. It is a rambling shrub, and owing to its hardness and ease of culture has become extensively grown in England. Its flowers are of a crimson colour, borne in terminal corymbs, and these are followed by large scarlet fruits in Autumn. There is a beautiful white variety which is equally hardy and vigorous. The Cinnamon Rose, or May Rose, is a European species, which was grown in England at any rate in the sixteenth century. It bears small pale carmine flowers about the end of May. It has a curious and pleasant perfume.

Allied species are Rosa Lucida, with bright glaucous foliage, and blush-coloured flowers, followed by bright fruit; the Carolina Rose, which bears clusters of bright pink flowers in the Autumn; and an old, now almost extinct, variety of the Cinnamon Rose, Rosa du Saint Sacrament, with flowers of a delicate lilac. Then again we have the class of the Burnet-leaved roses. These have numerous leaflets and they all retain their sepals until the hips are matured. The little Scotch Rose, Rosa Spinosissima, belongs to this group. This is a small bush, with white solitary flowers, and is one of the parents of the various double and perpetual varieties

of Scotch Rose grown in gardens.

Allied to the Burnet-leaved Roses is Rosa Alpina, a native of the South of Europe, and one of the parents of what are known as the Boursault Roses. Rosa Alpina is a strong grower, with a climbing habit. It has a few purplish spines, and about the end of May it bears purplish crimson flowers which are followed by long, orange-red hips. The White Rose, Rosa Alba, bears wrinkled shiny leaves, and small, white, very fragrant flowers. It is one of the parents of many beautiful old

garden Roses, including Maiden's Blush, Celestial, and Félicité. Of the field Rose class we have, in addition to our own Rosa Arvensis and Rosa Systyla, the Evergreen Rose, Rosa Sempervirens, Rosa Multiflora, which bears dense clusters of small flowers, followed by bright red, pear-shaped fruits, Rosa Setigera, and the beautiful Rosa Moschata, or Musk Rose. This is a native of North Africa. It is a sturdy shrub, whose branches are provided with hooked spines, and bears large white flowers with a characteristic fragrance. It is a late summer bloomer, and many of our Noisette Roses are in part derived from it. The garden Roses Madame d'Arbley and Garland are believed to be hybrids obtained by crossing the Musk Rose with Rosa Multiflora. The Barberry-leaved Rose, Rosa Berberifolia, is a somewhat tender species, bearing pretty yellow flowers. A hybrid derived from it, Rosa B. Hardy which bears vellow flowers with a chocolate spot at the base of each petal, is not infrequently cultivated in English gardens. The Apple-fruited rose, Rosa Pomifera, is not unlike our Dog Rose in appearance, but the flowers are often semi-double. The fruit is large and crimson, and the leaves give off a pleasant fragrance, not unlike that of Sweet-briar. The Ayrshire Rose is a lovely native species of which several varieties are now grown, a very strong grower, and one which will tolerate town conditions. Its one drawback is that the flowers are scentless or practically so. Its varieties bear flowers of pink or white. One of the most beautiful of the species Roses is the Austrian Briar, bearing yellow single flowers only during June and July. The plant is distinguished by the tinge of brown and vellow which runs through the whole, the young shoots being almost chocolate coloured, while the sepals have a brownish tinge. The flowers vary in the cultivated varieties between deep reddish copper and pure yellows, while there are two double sorts which are sometimes grown. The Banksia Roses are well known, and are natives of China, but being tender they are best grown against a south wall. The original species, Rosa Banksia Alba, has white flowers, but there

is a yellow variety.

A beautiful little Rose is the Corsican Rosa Seraphini, which is of comparatively recent introduction into England. It is a trailing plant, reaching a height of 9 or 10 inches. In June a single bright pink Rose is borne at the end of almost every little shoot. The stems are reddish, and the leaflets give an almost fern-like appearance to the plant. Another dwarf Rose suitable for rock gardens and similar situations is Rosa Albina Pyrenaica. This grows to a height of about 2 feet and bears crimson single flowers. Another small growing Rose is Rosa Nitida. This is a very vigorous species, and its root stems travel underground, quickly spreading in all directions. Its flowers are bright pink. The leaves are a shining dark green in Summer, changing to purple in the Autumn, and its stems are covered with red spines. It is almost equally beautiful in Winter and Summer. Rosa Sericea bears beautiful white flowers composed of four petals arranged in the form of a Maltese cross. The leaves are of a beautiful green, each being composed of numerous small leaflets covered on the back with fine down. It usually flowers early, often by the middle of May. Rosa Altaica bears very large single white flowers faintly tinged with yellow. In the Autumn the flowers are succeeded by black hips. Rosa Hispida, an allied species, is very similar, but the flowers are yellower in colour. Rosa Zanthina is another relation of these two, with flowers of an even deeper yellow. Rosa Moyesii bears large yellow flowers, and Rosa Andersonii bears large Roses of a bright rosy pink colour. A Rose worth growing for its foliage as well as for its flowers is Rosa Rubrifolia, which has red stems and glaucous leaves faintly tinged with pink. The flowers, which are pink in colour, are small and not unlike those of the Blackberry. Many other Roses are well worth growing for their bright red stems and berries in the Autumn and Winter. Among these may be mentioned Rosa Nutkana, Rosa Acicularis, Rosa Blanda, and Rosa Alpina Pendulina. Spinossissima Lutea is a beautiful little Rose with flowers of a good full yellow, resembling the colour of Marechal Niel. One of the great pleasures associated with the growing of the Rose species is that owing to the early flowering of many of them the Rose season may be extended by nearly two months.

AUTUMN-BLOOMING ROSES

WHAT are commonly called "old-fashioned Roses" are for the most part Summer bloomers, and once July has passed we have to wait for the next year before we can again enjoy their flowers. Fortunately, however, we have now several classes of Roses which bloom not only in the Summer but continue through the Autumn, often right on to November. Of these classes the three principal are known as the Hybrid Perpetuals, the Tea Roses, and the Hybrid Teas. The earliest varieties of hybrid Perpetuals were obtained by various crosses of Bourbons, Damasks and Chinas, but practically no class of Rose but has been drawn upon in the production of the numerous beautiful varieties which come into this group. They mostly rejoice in rich, rather heavy soil, and a large number of our most fragrant Roses are among the hybrid Perpetuals.

The group of Tea Roses includes perhaps the most delicately beautiful and delicately fragrant of all Roses. All our modern varieties are descended from the old Blush Tea Rose and a yellow variety of the same, which were introduced from China at the beginning of the nineteenth century. Though more susceptible to frost than hybrid Perpetuals they cannot be reckoned less hardy. Given a rich, light, well-drained soil and even the slightest protection during very cold weather, there are few parts of England outside the big towns where

Tea Roses cannot be successfully grown.

Among the best of the Teas may be named Marechal Niel, rich yellow; Anna Olivier, buff; Perle des Jardins, golden yellow; G. Nabonnand, flesh colour; Princesse de Sagan, velvety crimson; Mme Lambard, pink; Mme Hoste, primrose colour; Marie van Houtte, lemon, tipped with copper; Edith Gifford, white; Mme Falcot,

apricot.

Among Hybrid Perpetuals may be named General Jacqueminot, brilliant crimson; Marie Baumann, carmine; Alfred Colombe, carmine; Frau Karl Druschki, white; Charles Lefevre, crimson; Prince Camille de Rohan, maroon; Duke of Connaught, dark crimson; Mrs John Laing, pink; and Mrs Sharman Crawfurd, pink.

Others will be found among the selections of Roses

at the end of the book.

The class of Hybrid Tea Roses is a new one. In the official catalogue of the National Rose Society for 1882, no hybrid Tea Rose is mentioned. In the catalogue of 1884 three varieties are named, Cheshunt hybrid, Longworth Rambler, and Reine Marie Henriette. By 1893 the list had swollen to twenty, and in 1899 to forty, whilst in the last edition of the catalogue no less than

172 varieties are named.

This class includes Roses which on the whole may be counted on to provide the greatest profusion of flowers for the garden. They are as free flowering as Teas, and as vigorous and hardy as the hardiest hybrid Perpetual. In matters of cultivation there is a good deal of difference of requirement according to variety, some needing almost the same treatment as Tea Roses, whilst others call for very similar treatment to that given to hybrid Perpetuals. Especially in pruning is judgment called for. On the whole hybrid Teas require comparatively little pruning, certainly very much less than is usually desirable with hybrid Perpetuals. The Rev. J. H. Pemberton recommends the following hybrid Teas as specially suitable for garden decoration: Irish Beauty, among the whites, together with Kaiserin



(By courtesy of Messrs, B. R. Cant of Colchester)

Augusta Victoria and Marjorie; for creamy flowers Madame Cadeau Ramey and Viscountess Folkestone; and for yellows, Gloire Lyonnaise, Madame Pernet-Ducher, Madame Ravary and Gustave Regis. In the "blush" section come Clara Watson, Irish Glory, Killarney, Antoine Rivoire, Augustine Guinoisseau, Madame Jules Grolez, and Souvenir de President Carnot; these being followed in the true pinks by Camoens, Caroline Testout, Irish Modesty, La France, Rainbow, and Madame Abel Chatenay. In the red class those recommended are Gruss an Teplitz, Lady Battersea, Bardou Job, Marquise Litta, Princess Bonnie, Papa Gontier, and Marquise de Salisbury. This list includes the best of the garden hybrid Teas for general decoration, but for special purposes others of the class are more suitable. For instance, for growing as "pillar" Roses, Cheshunt hybrid and Longworth Rambler, two of the oldest of the hybrid Teas, are excellent, as also are Pink Rover, Reine Marie Henriette, Reine Olga de Wurtemberg, Waltham Climbers, Climbing Captain Christy, Climbing Kaiserin Augusta Victoria, Climbing La France, and Climbing Mrs W. J. Grant.

The beginner will hardly need a list of Roses suitable for exhibition, but should the reader wish to try his hand at exhibition blooms the following are some of the best of the hybrid Teas for this purpose. Amongst the whites, Bessie Brown, Beauté Lyonnaise, Kaiserin Augusta Victoria, Mildred Grant, Souvenir de Madame Eugène Verdier, Tennyson, and White Lady. Cream, only Madame Cadeau Ramey. For blush colours, Killarney, Antoine Rivoire, Lady Mary Fitz-William, and Souvenir de President Carnot; and in pinks, Countess of Caledon, Caroline Testout, Captain Christy, Danmark, Gladys Harkness, La France, Duchess of Albany, and Mamie. The three reds most suitable for this purpose are Exquisite, Mrs W. J. Grant, and Marquise Litta.

Before hybrid Teas were recognised as a distinct class M. Guillot had introduced the variety La France, although this was classed as a hybrid Perpetual. It seems likely that this variety is really a China hybrid. In 1879 Mr Bennett exhibited several seedling Roses produced by crossing various Tea Roses with hybrid Perpetuals. Most of his earlier varieties have dropped out of cultivation, but some, such as Viscountess Folkestone and Grace Darling, are still among the most popular varieties.

One of the great gains which gardeners have obtained from the introduction of the class of hybrid Teas is the group of single-flowered varieties such as Beauty, a pure white Rose with golden anthers; Irish Brightness, a vivid crimson shading to pink; Irish Elegance, bearing trusses of brilliant scarlet bloom; Irish Harmony, with creamy yellow flowers; Irish Glory, with very fragrant silvery pink blooms, and Irish Modesty, with large delicate pink flowers.

Left almost unpruned these Roses bloom continuously

from June till October, in suitable situations.

Another very useful class of hybrid teas is that of the semi-doubles; as bedding Roses these are unsurpassed. Such kinds as Marquise de Salisbury, with its long buds and bright velvety scarlet flowers; Killarney, with beautiful white flowers, suffused with pink; and Camoens, bearing abundance of rosy pink flowers sometimes striped with white.

THE WICHURAIANA HYBRIDS

THE popularity of "Dorothy Perkins" has drawn general attention to this class of beautiful and vigorous Roses. The parent of these hybrids, Rosa Wichuraiana, is a native of China and Japan. Its characteristic habit of growth is to produce long trailing shoots from the base which often grow 15 or more feet in a single year. It is essentially a trailing plant, the stems growing in length each season, and rooting wherever opportunity occurs. The leaves are small, light green in colour, with a glossy surface. The flowers are single, the petals being white and the yellow stamens prominent. The flowers are borne mostly in clusters, in large numbers, and usually keep up a continuous display during August, September, and part of October.

The hybrids derived from this parent inherit many of its most valuable characteristics. Nearly all of them are rapid growers, and have the same tendency to trail over the ground, though one or two dwarf varieties have recently been produced. In mild Winters the foliage, especially of certain varieties such as "Jersey Beauty" and "Edmond Proust," is practically evergreen, and as the leaves extend down the branches almost to the roots it may be realised how very beautiful such a bush must be at all seasons of the year. These Roses are very hardy in other respects, and are practically proof against mildew. All the hybrids are free-flowering, and most are Autumn-blooming or produce their flowers again in late Summer. Some of the varieties bear their flowers in small trusses, but more

flower in trusses of from 10 to 20 blooms. Some varieties are single, such as "Paradise" and "Jersey Beauty," others are double, as "Dorothy Perkins" and "Gerbe Rose." Every shade of colour from white to dark purple is represented, moreover nearly all these

Roses possess a delicate fragrance.

The Wichuraiana Roses are very easy of cultivation. Provided they are given a deeply dug and well enriched soil they will grow almost anywhere. They should be allowed plenty of room, as they soon cover a large space. They may be allowed to trail over rocks or stumps, or may be grown as pillars, or in connection with pergolas, or hedges. They may also be grown as weeping standards. The pruning is of the simplest. As soon as the flowering season is over all old wood should be cut right out, and the new ripened stems left to their full length. A hint for pruning may be taken from the type of the hybrid, those which approach more nearly to the Wichuraiana parent needing very little pruning indeed (to this class belongs the very popular "Dorothy Perkins"), whilst those which partake more of the nature of the Tea Rose parent should be dealt with a little more sternly. These latter bloom more on the older wood, so that more of this should be left, while the new laterals should be thinned and cut back.

Dr A. H. Williams gives a list of the best Wichuraiana hybrids to date (1910), selected and arranged so as to produce a show of bloom throughout the season. He gives as early sorts "Gerbe Rose," a very beautiful pink Rose, with the finest scent of all the Wichuraianas, and flowers of good form. The flowers appear either singly or in quite small trusses from early June, and it sometimes flowers in the Autumn also. Another early Rose, also pink, is "Rubsamen," which is a very free flowering variety, with slightly salmon pink blooms, with a resinous fragrance. This also occasionally

blooms in the Autumn. Early yellows are "Gardenia," "Alberic Barbier," and "Shower-of-gold." Of these the first two have deep yellow buds, changing, as do so many of these yellow Roses, to creamy white when open. The effect when the whole plant is in flower is very beautiful, but it is a disadvantage for cutting. The third, "Shower-of-gold," keeps its deep rich yellow colour very well when open. Mid-season Roses include "Schneeball," a very fine white, having large trusses of double rosette-like flowers, which appear from late June onwards: "Lady Godiva," a blush pink, in form very much like the well-known "Dorothy Perkins"; "Debutante," a pink Rose with a marked and delicate fragrance; and, of darker pinks, "Valentine Beaulieu," which is perhaps more salmon tinted than pink, with copper-coloured buds and flattish-double flowers. Two other beautiful mid-season varieties are "Leontine Gervais" and "Jean Guichard," both blending apricot, deep salmon, copper and rose in flowers and buds.

Among the late varieties we come first on "Dorothy Perkins," the white form and the pink, both being very free bloomers and bearing very large trusses of flowers. Then "Mrs L. Dewhurst," a good white; and the parent of them all, "Wichuraiana" itself. This is a very lovely plant, with its pure white single flowers, and its golden stamens. It blooms from late July to the end of October, bearing its clusters of glistening blossoms on stems more trailing than most of its descendants. With these we have for late blooming a blush pink, turning to blush white, "Sweetheart," very sweetly scented, and "Minnehaha," pink also and somewhat resembling "Dorothy Perkins," but with longer trusses of bloom; "Lady Gay," still slightly deeper pink in colour, with good clean dark green foliage, and a beautiful single pink with a white centre. "Paradise," with curiously twisted petals. All these are among the best of the

present varieties, and with this selection a good show of bloom may be confidently looked for throughout the flowering season.

The following list includes most of the best Wichura-

iana Roses to date (1910):-

Adelaide Moulle.-An early-flowering Rose, lilac-white,

with a large truss of small double flowers.

Alberic Barbier.—One of the best of this class. An early bloomer, flowering from June 6th with good almost evergreen foliage. The flowers are borne in small trusses of from one to five, of a good yellow, fading when open to creamy white. The blooms are large and double. This Rose flowers a second time in Autumn.

Alexandre Girault.—A good large double flower, of a

bright carmine.

Alexandre Trimouillet.—Flowers from late June. Blush salmon, fading to white, with light rose centre.

Amber. A dwarf Rose. This is an early flowerer, with

single blooms of a clear pale amber.

Anna Rubsamen.—This Rose is a very free bloomer, bearing great trusses of salmon-pink double flowers with a distinctive scent. It flowers from mid-June.

Auguste Barbier.—Another early flowering Rose. The semi-double blooms appear about June 15th, and are

of a lilac-rose.

Carissima.—Delicate flesh pink, with quilled petals.

The flowers are small and double, borne in large

trusses. Flowers from mid-July.

Climbing American Beauty.—This is another very free flowering Rose, with very large double flowers of bright rosy pink. It is early, flowering from the end of May in favourable seasons, and occasionally blooms in the Autumn.

Coquina is a late flowering Rose, with small single pink

flowers borne in clusters.



A light cherry-red Hybrid Perpetual. Very fragrant

Debutante.—A very lovely Rose, with a sweet scent. Its flowers are of a soft pink, borne in pyramidal clusters from early July, and occasionally in Autumn.

Diabolo.—This is a dark purple Rose, with a white spot at the base of the petals and golden stamens, the whole effect being rich and striking. Its flowers are large and single or semi-double, borne in clusters.

Dorothy Perkins.—This is so well known as hardly to need description. It is one of the best of the Wichuraiana hybrids, bearing large pyramidal clusters of small, very double rosette-like flowers. It is a very free bloomer, bearing flowers from mid-July till almost Winter.

Edmond Proust.—This is one of the Roses with quite evergreen foliage, and is therefore very useful as a screen or to cover trellis. It has buds of copper pink, which change, when open, to salmon and then white. The uncertainty of its colour is the worst point about this Rose. The flowers appear about the end of June and are borne in trusses.

Edwin Lonsdale is a pale lemon yellow Rose. It is a

strong grower, and very free in habit.

Emile Fortepaule.—This is another of the yellow Roses which turn to creamy white when open. It has small clusters of flat double blooms, and flowers from mid-June.

Evergreen Gem .- This Rose has a pleasant Sweet-briar perfume, with double flowers of buff and white.

It is an early bloomer.

Francis.—A late flowering Rose. Its flowers are single, bright red fading to a paler tint, borne in large clusters. Its stamens are yellow and conspicuous.

Francois Foucard.—An early Rose, with pale lemon flowers borne in trusses of one to five. These are double, and appear from June 15th, and sometimes again in Autumn.

Francois Juranville.—This is another of the Sweet-brian scented Roses, with loose double flowers appearing from late June. The flowers are salmon pink, with a yellow base to the petals.

Francois Poisson.—A double Rose with creamy white outer petals and a close centre of deeper yellow. It bears its flowers of medium size in trusses of

about fifteen or twenty from mid-June.

Frau Albert Hochstrasser.—A very free-flowering double yellow. This Rose blooms freely in Autumn.

Frau Marie Weinbach.—This is a chance seedling of the Wichuraiana, with small double or semi-double white blooms. A free-flowering Rose, blooming

about the end of June.

Gardenia.—This is one of the very best of the yellow Wichuraianas. It has a pointed deep yellow bud, streaked with coppery crimson, and the flower, when open, changes from clear yellow to creamy white. The flowers are sweetly scented, and are

borne very freely from June 1st.

Gerbe Rose.—This is a lovely pink Rose, of good shape and very sweetly scented, in fact the sweetest of all the Wichuraianas. Its flowers are borne singly or in small trusses from the first week in June, and also in the Autumn. It is a Rose which should be grown in every garden.

Iceberg .- This is a dwarf Rose, pure white, and very

good for bedding.

Jean Guichard.—This Rose bears large double blooms in small trusses. The flowers are blended deep salmon red and rose, with copper-coloured buds.

A very good Rose.

Jersey Beauty.—This Rose bears its flowers, which are large single blooms—as much as 4 inches in diameter—singly or up to five in the truss. The flowers vary from yellow to cream, and the stamens are

very decorative. This is a splendid Rose for cutting, and as its leaves are quite evergreen it is excellent for screens or trellises. An early flowering Rose, beginning to bloom at the beginning of June.

Joseph Billard.—This is another large single Rose, with 4-inch flowers, crimson with a deep yellow centre which fades to white. The stamens are distinctive and beautiful. The blooms appear from June 20th,

and also in Autumn.

Joseph Lamy.—This Rose bears its semi-double flowers singly on long stems; they are white edged with pink, and the effect is very lovely. A good Rose

for cutting.

Lady Gay.—This pink Rose is not unlike Dorothy Perkins, but the flowers are deeper in colour and rather larger. They are borne somewhat more loosely than those of Dorothy. The foliage of this variety is very distinguished, being dark and clean, and practically evergreen.

Lady Godiva.—This is like Dorothy Perkins in all but colour, which is more nearly a flesh tint. It and

the preceding Rose flower from mid-July.

La Perle.—This is a perfectly shaped creamy white double Rose, with a truss of from one to five flowers. It is a free bloomer, beginning to flower

the first week in June.

Leontine Gervais.—This bears a truss of from one to five rich salmon and apricot double flowers, with buds of copper red. The old flowers fade to yellowish pink. This is one of the best of the coppers, but as a screen it is not recommended as its leaves fall early. It flowers from mid or late June.

Mme. Alice Garnier.—This is a small very double rosettelike Rose, yellowish, shaded to pink at the edges.

It flowers in mid-June.

Marco.—A yellowish copper fading to white. The flowers are borne on long stems and are full and very perfectly shaped. An early flowering Rose.

May Queen.—Also, as its name implies, an early bloomer.

It bears a small truss of medium-sized flowers, pink

with a white centre.

Minnehaha.—Resembles Dorothy Perkins, but its flowers are larger and paler in colour. It has a long truss, with the individual flowers on good footstalks. It flowers in July, and sometimes in Autumn.

Mrs Littleton Dewburst.—A very good white Rose, much like Lady Gay, from which it is a white sport.

Milky Way.—This much resembles the type, Wichuraiana. It is white, with flowers either single or with a double row of petals.

Northern Light.—A free flowering Rose bearing large clusters of medium sized blooms of all shades of

pink and white. The flowers are double.

Paradise.—This Rose has its petals curiously twisted. It flowers from early July, bearing pink flowers with a white centre.

Paul Transon.—This has a coppery carmine bud, which opens into a rather flat double rose-pink flower.

Large trusses of from ten to twenty flowers, from mid-June, and sometimes in Autumn.

Pearl Queen.—A large double bloom, with blush centre,

borne in trusses of from five to seven.

Pink Roamer.—This is a June-flowering Rose, with a pretty pink single flower with white centre. Its colour is fugitive.

Pinson.—A nice large flower, with a coppery bud, turning to pale buff, and finally white tinged

with flesh colour.

René André.—This bears large double blooms, in trusses of from one to five. The flowers are yellow, streaked with carmine and pink, with buds of

copper red. It is a free bloomer, flowering from

mid-June and also in Autumn.

Robert Craig.—A large yellow Rose, with a rather flat flower, very double, pale yellow with an orange centre. Its buds are of a darker orange, borne in small trusses.

Rubra.—A single Rose, rosy crimson with a white centre and striking stamens. The trusses are of

fair size and the flowers appear in late June.

Ruby Queen.—This is a curious Rose, as its blooms do not vary in colour according to their state of development, but according to the season. For instance, in the early part of the season, in June, its flowers are very vivid carmine scarlet with a white centre, whilst in July and later they are blush white, shaded to carmine at the edges. Its flowers are double and loose, borne in a small truss. A beautiful and striking Rose.

Schneeball.—A beautiful pure white Rose, with very double rosette-like flowers borne in large trusses, which do not all open at once. It flowers from

mid-June.

Shower of Gold.—This is perhaps the best of the yellows, as it keeps its colour well when open, and does not fade as most of the yellows will do. It is a deep rich colour, and a very free bloomer, with double flowers, appearing from mid-June.

Snowdrift.—A good white, very vigorous in growth.

Sweetheart.—This is one of the sweetly-scented Roses, flowering from mid-July and in Autumn. It has small double pale pink flowers, changing to blush white, borne in a large truss. A very pretty Rose.

The Farquhar.—This is an Evergreen, much like Dorothy Perkins, but with more white in its centre. It

flowers from mid-July and also in Autumn.

Tricolore.—This Rose is very striking but not really

beautiful. It bears flowers, some of which are all white, some all crimson-lake, while some are white shaded with crimson in the centre. They have a distinct resinous fragrance. The flowers appear from June 20th.

Universal Favourite.—This is a briar-scented Rose, with double pink flowers in trusses of from ten to twenty.

It flowers from mid-June.

Valentine Beaulieu.—This is a fine Rose, the blooms, when open, being deep salmon pink and in bud copper red. The flowers are flattish, double, and very full. It flowers from mid-June.

W. F. Dreer .- A pretty little white Rose, with rosettelike flowers sometimes shaded with pink. It flowers

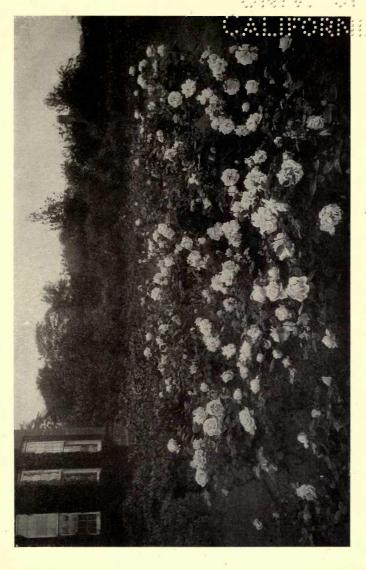
early in June and sometimes in the Autumn.

Wichuraiana.—This is the parent of all the Hybrids, and was imported from Japan in about 1873. It has clear white single flowers, with beautiful conspicuous golden stamens. These are borne in clusters very freely from the end of July to the end of October. The stems are more trailing than those of its descendants, and its leaves are smaller.

White Dorothy. - This is a white variety of Dorothy

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Perkins, and is like it in all but colour.



DECORATIVE ROSES

OF Exhibition Roses Tea Roses are on the whole the most decorative, but all varieties are by no means equal in this respect. Some of these kinds whose blooms are of the greatest excellence from the exhibition point of view, such as Comtesse de Nadaillac, are by no means the most decorative from the garden point of view. The kinds which may justly claim to have the greatest decorative value are such as have strong constitutions, free growth, and continuity of blooming. It should be remembered that Tea Roses, far from being delicate, are in many respects hardier than hybrid perpetuals. If we are to get the greatest value from these Roses which we grow from the decorative or garden point of view we must give them very different treatment from that which we should give to plants grown with a view to the exhibition table. They must be much less pruned, much less molly-coddled, and generally much more let alone. Different varieties need different situations, of course, some being suitable for walls, others for pergolas, others for beds and borders. I agree with Mr Kant that every garden of ordinary dimensions must provide space for some Roses, and where practicable beds of Roses in which may be planted in groups of one variety such charming and continuous bloomers Souvenir de Catherine Guillot, Anna Olivier, George Nabonnand, Madame Chedane Guinoisseau, and others of similar habit of growth, bearing in mind always that the colours must harmonise.

If planted in borders the taller growing ones should

be placed at the back, if in beds the taller growing should be placed in the middle. Soil and situation play a less important part in the life of these Roses, preference being given to good, mixed, moderately gritty soil, rather than stiff clay or loam; and the object being to produce abundance of bloom rather than large individual flowers the manure is not of so much consequence.

It is not only the kind of Roses whose bloom carries such weight on the exhibition table that are valued as garden decorations. After all, it is not only the single bloom wherein lies the beauty of a plant, but in its branches and foliage and habit of growth. In suitable situations the free-growing Roses such as the Wichuaiana group, the Ayrshires, the Sempervirens group, and many of the single-flowered species produce far more beautiful effects than are yielded by any hybrid perpetual, no matter how perfect its bloom. Many of these Roses have all the grace of our own wild species, a grace which too many of our Roses grown for exhibition have lost. Many of the free-growing Roses look their best when allowed to hang over some wall or bank, or to ramble through low tree growth. Others, again, of which the Wichuraiana Roses are examples, do best trailing over the ground, or over a sloping bank. Then again, the Japanese Roses, Rosa Rugosa, should not be forgotten. They are beautiful in flower and in fruit. Other perpetual flowered Roses suitable for semi-wild cultivation are Longworth Rambler and Gruss an Teplitz. Many of the China roses again, such as Laurette Messimy and Madame Eugene Resal, are beautiful and vigorous when allowed to ramble at will.

CLIMBING ROSES

APART from walls, climbling and rambling Roses may be grown very effectively over pergolas. The simpler the pergola the better. At the back of a border uprights of wood may be placed, and these may be connected together by smaller rods or branches; the wood-work should not be too substantial or conspicuous in any way. In planting such pergolas it is advisable to plant Roses chosen from many sections of the family, so that the flowering period may be prolonged as far as possible. Mr Gordon has suggested the following as a good selection of climbers for a prolonged show of bloom.

Among the Ramblers—Algaia, Claire Jacquier, Crimson Rambler, The Dawson, Dorothy Perkins, Dundee Rambler, Electra, Euphrosyne, Felicité et perpetué, Helene, Leuchstern, Psyche, Queen Alexandra, Thalia,

and Thoresbyana.

Teas.—Belle Lyonnaise, Bouquet d'or, Climbing Perle des Jardins, E. V. Harmanos, Gloire de Dijon, Le

soleil, Madame Moreau.

Hybrid Teas.—Bardou Job, Climbing Caroline Testout, Climbing Mrs W. J. Grant, Gruss an Teplitz, Longworth Rambler, Pink Roamer, Reine Olga de Wurtemburg, and the Wallflower.

Noisettes.—Aimée Vibert, Alister Stella Gray, Céline Forestier, Madame Alfred Carrière, and William Allen

Richardson.

An interesting list of the best climbing roses is obtained from the result of the Nickerson Awards for 1908, where one of the classes in which votes were

registered for the best varieties was the division of Climbing Roses, which were again divided into those which bloom in clusters and those which bloom more or less singly. In the former section, those blooming in clusters, the first among the "Shades of crimson" class was the old favourite, Turner's Crimson Rambler. This is one of the very best cluster Roses. The second place was taken by Gruss an Teplitz, which really hardly comes fairly into the class, as its blooms are not strictly in clusters and it is only semi-climbing. Mr Molyneux, in commenting on this Rose, tells an amusing little tale of a friend of his, a lady, who was admiring some plants of this rose. She asked him if he knew its correct title, telling him that she had been assured that its proper name was "grows in triplets," as the flowers always came three at a time.

The third place in this section was held by Hiawatha, which is a fairly new Rose, and is considered by some

growers to be even superior to Crimson Rambler.

In the "Shades of pink" section Dorothy Perkins came first by very many votes, followed by Blush Rambler. This last Rose climbs vigorously, and is especially suited to form hedges. Minnehaha had the third place, with its very large clusters, possibly the largest of any Rose. It makes a good weeping standard, and its individual flowers are well set in the truss, and have good footstalks.

The whites were headed by climbing Aimée Vibert, followed by Felicité-et-Perpétue, the third place being filled by Bennett's Seedling, otherwise known as Thoresbyana. All these three are very old Roses.

The Yellow class is led by Alister Stella Gray, a long way ahead of the nearest competitor, Clare Jacquier. The former of these is a very lovely little Rose, especially good for buttonholes, and a good free grower when once established. The second is rather a delicate

plant, and is not often seen at its best. The third was Aglaia, a good Rose when established, but needing a year or two to settle down, when vigorous growth is made.

The second division includes all the Climbing Roses that bloom more or less singly, the first place in the Crimson section of which is held by Ards Rover. All three of the winning Roses in this section come close together, so that they have a nearly equal claim to popular favour. The two others are Reine Olga de Wurtemberg, and Longworth Rambler. All three are excellent Roses and one or all of them should be in every garden. Among the Pinks, Climbing Mrs W. J. Grant holds the first place, and fully deserves it. This is a good Rose for almost every purpose in the garden. It is equally satisfactory as a wall or pillar Rose, and is one of the most useful Roses we have for the Pergola. Climbing Caroline Testout was second in this section, a vigorous and beautiful Rose, and a free flowerer. Papillon took third place. In shades of white Madame Alfred Carrière was easily first, and in addition had the signal honour of receiving more votes than any other Rose in the competition. Una, though hardly a true white, took the second place; a Rose which is most beautiful when seen as a single bush standing alone. The third was one of the Roses which are generally believed to be natural species-Macrantha. This, like the last named, is a better pillar or bush Rose than a strict climber.

The first place in the yellow class fell to that old friend William Allen Richardson, an excellent though variable Rose. It requires to be given exactly what it likes as regards situation and soil and aspect or it will produce nothing but dull whitish-cream flowers with hardly a trace of the true coppery flush. The second place was held by Gloire de Dijon. Mr Molyneux hints that this is more by sentiment than merit. However,

such an old favourite must have sterling merit about it or it would not hold its own as it does against so many newer rivals. Madame Jules Gravereaux took third place. This Rose is a fairly new variety, and has received much praise since its introduction. Its individual blooms are sometimes very perfect, one of them having been rumoured to have received six points from competent judges at a National Rose Society Show, five points being considered the usual maximum.

The two divisions into which these Roses have been classed divide them roughly also into Summer- and Perpetual-flowering Roses. The first division, with the exception of Gruss an Teplitz and Alister Stella Gray, are all Summer-flowering, while the second division, excepting Una and Macrantha, are all

Perpetuals.



MRS. HUBERT TAYLOR
Tea Rose, pale pink, edged with white. An exhibition variety

STANDARD ROSES

For general garden decoration standard Roses cannot be compared with the bush form. Still, they undoubtedly have their place, and in their place possess a peculiar and very real charm. They are not, as a class, so popular as formerly, largely owing to the fact that the varieties grown as standards are by no means always those most suitable for this form. Roses differ much in their growth and constitution, and different varieties have such various habits that a good deal of judgment is called for in selecting suitable kinds to grow as standards. Roses which look the best as cut blooms in exhibitions are far from being the most suitable to produce a fine effect in a garden. There are plenty of suitable varieties in every class: hybrid Perpetuals, hybrid Teas, and Teas, but also many of the Ramblers, such as the Crimson Rambler, and such vigorous Roses as the Ayrshires, make fine standards of considerable decorative value.

The technical definition of a "standard" Rose is one having a clear stem of three feet or over, without lateral branches within this length. Standards are effective in certain schemes of garden decoration, but require more attention than the bush kinds and are less hardy. A new fashion has recently become popular, the weeping standard, in which the top growths trail and hang from the top of the slender stem; giving at times a very beautiful effect. Many of the newer Roses, especially the Wichuraiana class, are perfectly suited to this form, and in growing them the first care must be the selection

of a suitable stock. The difficulty is to obtain a Briar stock which, whilst being young enough to be well ripened and vigorous, shall yet be thick enough to support the luxuriant growth of the foster-plant. When this has been secured—it should be about half an inch through—the selected Rose should be budded on it, and in the second year of growth the tree may begin its training. It is not advisable to train the first year, beyond the mere tying erect of the young shoots. Four years are needed to train and grow a perfect weeping

standard, so that it need not be hurried.

In the second year the training should be begun in the spring by attaching to the stake rings made of split cane, tied into the required size, to which the shoots must be directed, the object being to form a rough umbrella shape. The rings will of course be only small in the first year, whilst the shoots are short and slender, larger and larger ones being used at subsequent times. The shoots should be carefully tied in position on these hoops, and the plant carefully watched and treatedespecially with regard to watering and syringing should the weather be dry-so as to encourage new strong growth. Not much cutting out will be required in this early stage, as room can be found for nearly all the shoots on the rings. Cutting out will need to be done in the third year, when the growth will be very luxuriant, and early in September the plant should be examined and the finest young shoots selected. The older shoots should be cut away to make room for these. and they will harden off nicely before the winter frosts. In this way the tree is constantly renewed, and a show of bloom ensured each year.

If the shoots are bent down too sharply in the first instance when beginning to train, it is unfortunately not unusual to find one or two of them broken off at the union with the stock. It is well therefore to allow the shoots at least nine or ten inches of upright growth

before bending them to the ring.

For weeping standards the Wichuraianas are far the best suited by nature, their trailing stems forming a lovely drapery of flower and leaf, and among the best of them for the purpose are Paul Transon, Auguste Barbier, Dorothy Perkins, François Foucard, Albéric Barbier, Elisa Robichon, Gardenia, René André, Debutante, Jersey Beauty, Joseph Lamy, Leontine Gervais, Ruby Queen, and White Dorothy; with Hiawatha, which although often classed as a Wichuraiana, is not really one of them. Other Climbers which make satisfactory weeping standards but are rather stiffer in habit are Climbing Aimée Vibert, Perpetual, Thalia, and Tea Rambler. Other of the climbers will be found to answer well on experiment. Among them Bennett's Seedling and Dundee Rambler, both of them Ayrshires, are useful for these tall weeping standards, and Evangeline, a hybrid Tea, will also be found to do well.

SCENT IN ROSES

IT is questionable if a true Rose-lover can seriously regard the claims of any Rose to greatness, no matter how beautiful its form or colour, if it is without fragrance. Yet it is unfortunately true that many of the Roses with the greatest reputation among the laity possess little or no fragrance. Even the beautiful Frau Karl Druschki, with its exquisite form and almost perfect substance, is practically scentless. Among other well-known Roses with little or no fragrance may be named Crimson Rambler, Mrs Cutbush, Maman Levavasseur, Baroness Rothschild, Merveille de Lyons, Mildred Grant, Her Majesty, and Mrs Theodore Rooseveldt.

It is useless to attempt to give a complete list of Roses that are fragrant, since fortunately it is still the scentless Rose that is the exception, but a small list of those Roses in the various classes which are considered the most strikingly fragrant may be of use to the beginner.

Of all Tea Roses probably Marechal Niel stands first for fragrance, after which may be named Molly Sharman Crawford, Catherine Mermet, Bridesmaid, Muriel Grahame, Sunset, Mrs Edward Mawley, Adam, Beryl, Gloire de Dijon, Meta, Mrs James Wilson, Mme Eugène Verdier, Cleopatra, Souvenir de Lady Ashburton, and Christine de Noue, all of which are fragrant to a high degree. Among the Noisettes come Lamarque and Desprez-à-fleurs-jaunes.

Of hybrid Teas perhaps the sweetest are La France and Lyon Rose, with a long following of sweet-scented

kinds. Cheshunt hybrid, Augustin Guinoisseau, Mme Abel Chatenay, Mme Jules Grolez, Cherry Ripe, Johanna Sebus, Caroline Testout, Mrs W. J. Grant, Daisy, Duchess of Albany, Mrs W. C. Whitney, Grossherzog Ernest Ludwig, Gruss an Teplitz, Papa Lambert, Charlotte Guillemot, Princess Bonnie, Belle Siebrecht, and W. F. Bennett, with many others, are all sweetly

fragrant.

The class of hybrid Perpetuals includes many Roses of great fragrance. In the very first rank are Commandant Felix Faure, Senateur Vaisse, Etienne Levet, Marie Baumann, Dupuy Jamain, Exposition de Brie, Heinrich Schultheis, Maurice Bernardine, while after these may be named Mrs John Laing, General Jacqueminot, A. K. Williams, Horace Vernet, Victor Hugo, Alfred Colomb, Prince Camille de Rohan, Charles Lefebvre, Ulrich Brunner, Dr Andry, Earl of Dufferin, Mme Gabriel Luizet, and Louis van Houtte.

Among the Bourbons we have Souvenir de la Malmaison, Mme Isaac Pereire, with an elusive but typical fragrance, and among hybrid Bourbons is the distinct and delicious Zephirine Drouhin. Of the Provence, Gallica, and allied classes perhaps the sweetest are the common Provence or Cabbage Rose, Rosa Mundi, Maiden's Blush, York and Lancaster, and

Tuscany.

Among Moss Roses we have Blanche Moreau, Zenobia, and Salêt, whilst the chief contribution of the Scotch Roses is Stanwell Perpetual. This is a real utility Rose, flowering sometimes as early as May, and continuing until cut down by frost. The scent resembles that of the Old Provence. The Wichuraiana hybrids include many exquisitely fragrant Roses, among which are Auguste Barbier, Gerbe Rose—the fragrance of which has been described as finer than that of any other flower—François Juranville, Evangeline, Leonie

Lamesche, Debutante, and Mrs K. Harris. The Multifloras give us Waltham Bride, which besides possessing a fragrance quite its own is one of the earliest Roses to flower in summer, while the Polyantha class includes Lady Violet Henderson and Anna Marie de Montravel.

Then there are the Musk Roses, especially Mme d'Arblay and Nassau, whilst although the China Roses are not especially noted for fragrance, two of them, Mrs Bosanquet and Comtesse du Cayler, deserve a place on our list. The Rugosa section includes Conrad F. Meyer, Blanc double de Coubert, Fimbriata, Belle Poitevine, Mrs Anthony Waterer, Rose-à-parfum-de-l'Hay, and Alba.

Lastly we have the very beautiful species of Wild Roses, nearly every one of which has an individual perfume, no less delicious though often more subtle than the cultivated garden varieties. It is hopeless to attempt to place these in any order of excellence, but we may name Pissardi, Moschata, and Brunonis as seeming to us the most delightful. The "Rose Garden," by Mr William Paul, founder of the great Rose-growing firm of that name, published in 1848, gives a list of fragrant Roses, very many of which have now gone out of cultivation. The Crimson Damask or Rose du Roi, a very old Rose given amongst them, is one of the very few survivals of the class called Damask Perpetuals, now almost driven out by the hybrid Perpetual. The same authority gives Desprez as one of the finest scented Noisettes whilst out of the list of very sweet tea-scented Roses the only survivor is Gobbault. The Stanwell Perpetual again appears here as the sweetest of the Scotch Roses.



MRS. E. MAWLEY A very fragrant Tea Rose, pink tinted carmine

ROSES THAT DO WELL IN TOWNS

IT is commonly thought that Roses cannot be grown in London or other large towns, but this is very far from being correct, though care must of course be taken to choose suitable kinds for the purpose. Roses with shining leaves generally do best, for their leaves are easily washed clean from deposits of smoke. treatment given to these Roses should be more than usually liberal both in cultivation and manure, for it is only by maintaining the plants in a state of high vigour that we can hope to master the fog and the absence of sunlight and all the other harmful conditions consequent upon town life. Mr Hudson, who has had considerable experience with Roses in the neighbourhood of London, recommends the following kinds. Among climbers he places Gloire de Dijon and all its forms, Alister Stella Gray, Charles Lawson, Crimson Rambler, all the Penzance Briars, Zepherine Drouhin, Madame Plantier, Carmine Pillar, Aimée Vibert, Aglaia, Thalia, Euphrosyne, and Rêve d'Or. In the Tea, hybrid Tea, and China section he gives Caroline Testout, Mrs Grant. otherwise known as Belle Siebrecht, Viscountess Folkestone, Marquise Litta, Madame Abel Chatenay, Hon. Edith Gifford, White Maman Cochet, Gruss an Teplitz, Kaiserin Augusta Victoria, Georges Nabonnand, Laurette Messimy, Eugène Resal, Irene Watts, Souvenir de Catherine Guillot, Souvenir de I. B. Guillot. Corallina, La France, and Marquise de Salisbury. strongest growers among the hybrid Perpetuals here recommended are Duke of Edinburgh, Dr Andry, Mrs Rumsey (which last is proof against mildew), and Mrs Sharman Crawford.

All the Rugosa section do well near towns, and have the advantage of bearing very decorative berries in the Autumn. Amongst them Conrad Ferdinand Meyer is greatly recommended. It is a pale pink, a hybrid twice removed from Rugosa, and is well known for its remarkably luxuriant growth. It sometimes makes shoots ten feet long in a single season. It is a very early-flowering Rose, coming into bloom even before Gloire de Dijon,

and it has a very sweet scent.

The town dweller who loves and would like to grow good Roses may take heart at the favourable view of his chances taken by Mrs S. Montagu, in a paper contributed to the National Rose Society. Mrs Montagu lives in the north of London, in the Regent's Park district, and therefore has the advantage of a fairly high situation and the neighbourhood of a large open space, which doubtless helps to keep the air fresh and pure, but even with these advantages the handicap is sufficiently heavy, and the result she obtains is the more encouraging. Mrs Montagu favours the following treatment. Roses are grown wherever a bed or border affords sufficient sun, some of them being standards and some bushes. They are arranged in groups or singly, and "given a favourable Summer, the results are sufficiently good to be very pleasant." They are planted in a mixture of yellow loam and old manure, with some grit for the roots, on a clay subsoil, and mulched in the Autumn with short manure. About every four years a top-dressing of lime is given to purify the soil, and during the growing season they have occasional doses of some good fertiliser. They are pruned back hard, and before growth starts they are thoroughly cleaned with soap and water applied with a painter's brush and then washed off with plain water, so that the bark may be

ROSES THAT DO WELL IN TOWNS 85

clean and fresh for the influence of the Summer sun and rain. Disbudding is essential, as no amount of care will produce shoots thick enough to hold themselves upright under any burden of blooms. Few shoots, but as good as possible, should be the aim of the cultivator, as this will give the foliage a chance as well as the flowers. Orange rust and mildew are dangerous enemies, the

latter being treated with sulphur and soot.

Mrs Montagu gives a list of the Roses which she has found most satisfactory in her town surroundings, which for the benefit of my town readers I will give in full. One of the most reliable is Captain Hayward, and with this come Madame Bérard, Shandon, Clio, Rêve d'Or, Killarney, Frau Karl Druschki, and Margaret Dickson. Gloire de Dijon, of course, and all the Ramblers, especially Dorothy Perkins, and the Penzance Sweet-briars do very well, and for those who like the old-fashioned Roses there are the Moss Roses, particularly the old pink and white, and Maiden's Blush.

EXHIBITING ROSES

THE growing and preparing of Roses for exhibition is, of course, a branch quite apart from the ordinary routine of Rose-growing. It is obvious that this must be so, for the aims of the two departments are so different, that equally differing methods must be followed. The aim of the exhibitor of Roses is to procure a certain limited number of blooms, each of which should be, in its way, perfect. For this he is quite willing to sacrifice the profusion of blooms which is, on the other hand, the aim of the man who grows his Roses for their beauty and scent in the garden. The exhibitor is willing to sacrifice the many to the one or two perfect individuals, while the ordinary grower prefers to see his Rose tree covered with flowers, individually perhaps less perfect, but each contributing to a perfect whole; so that he who decides to devote himself to growing Roses for exhibition must make up his mind to a severe discipline both for himself and his plants. His first and primary task is the same as that of the ordinary grower; he must have his plants in the best possible condition for them to bear his exhibition blooms. They must be strong and well-nourished, but they should not be allowed to keep more than a certain restricted number of shoots, so that the whole strength of the plant may be directed towards the chosen buds. As soon as the buds are seen, all but those selected should be removed, leaving one only to each shoot. Any which appear later should be at once picked out with a knife without wounding the shoot. Each shoot should be secured to a separate stake, and kept out of reach of the others, as there is danger of the buds being spoiled by an accidental scratch or bruise from another shoot being blown against them. The plants themselves are best grown in parallel rows, with a good space between each row, not less than two feet, and a similar distance should be left between each plant in the rows. Between each pair of rows a 3 foot space should be left, that the Roses may be attended to without fear of injury. They will need plenty of attention, and will be the better for a liberal supply of manure, either farmyard or chemical. Mr Sanders gives a good formula for the latter-three pounds of superphosphate of lime and one pound of nitrate of potash. Of this one ounce should be dissolved in a gallon of water, and a gallon given to each plant once a week from the time when the buds form. Soot-water as an alternative to this every other week is even better.

The pruning of the Hybrid Perpetual and Hybrid Tea classes should be done in March, and should begin pretty early in the month. The strongest and most ripened shoots are those to select, and from three to six of these, according to the size and strength of the plant, should be left. In the case of Hybrid Perpetuals, they should be shortened to about 3 to 6 inches, but the stronger varieties of the Hybrid Teas may be left a little longer.

These latter should be left to the end of the month, or even the beginning of April, and it will often be found that the Winter, if severe, has done most of the selecting of shoots already, and when the dead wood is cut away most of the shoots which remain are quite as short as need be.

When, after this pruning, the young shoots begin to appear, it is wise not to be in too great a hurry to thin them to the final number. Late frosts and cold winds do a good deal of thinning on their own account, and it may be necessary to substitute a weaker shoot for a strong one which has been destroyed in its youth.

When all danger from these causes is over, the strongest shoots should be chosen and all the others removed. The art of thinning out is one which holds an important place in the growing of show Roses, and can only be properly learned by experience and experiment. As a rough rule, however, the most likely growths to bear good flowers are those which spring from the top buds of the pruned shoots. The very strong sucker-like shoots which will be found at the base of the plant should never be retained, as they are not only unduly hungry but generally bear only coarse blooms, quite unfit for exhibition.

The selected shoots will at last begin to show flower buds, usually three to each shoot, and of these one only must be allowed to remain. The middle one is usually chosen and the other two buds carefully removed. The next care is the provision of shade, as a strong sun or a sudden shower of rain may spoil the work of months. The simplest form of shade is one made of wire in the shape of a cone, 12 inches across and about 9 inches high. This should be covered with calico stretched tight, and should be so arranged that it can slide up and down a rod, pierced with small holes in which a pin can be inserted to hold the shade at any given height. A simple form of protector which is recommended by some growers is merely a piece of parchment-like tissue paper put over the bud like a bag, and tied round the stem below it. Enough room must of course be left for the bud to expand, and these wrappings will be found to protect the bloom from every normal downpour.

Rose boxes for sending the blooms up for exhibition should be bought, as they are made in definite regulation sizes, and are admirably adapted for their purpose. They all have a tray pierced with holes for the reception of

the tubes which hold the blooms.

The time for cutting the blooms must depend upon



CAROLINE TESTOUT A vigorous and beautiful Hybrid Tea, bright pink

varying conditions. For instance, where the blooms are being shown in the immediate neighbourhood they need not be cut until the morning of the Show, or, in the case of the most forward blooms, the evening previous to it. The early morning, just late enough for the dew to have dried off the blooms, is the best time for cutting. The state at which the flower should be cut varies greatly with the variety, some blooms opening very rapidly when cut, while others show little or no change for hours. In order to get them at their best, if they have to be cut over night, they should be taken at about eight in the evening, as later they will have begun to close, and the stage which they have reached will be less easily defined. The blooms should be labelled as soon as cut. and placed in water at once. The boxes should be all ready in a cool shed, not in the open, the tubes full of water and surrounded with green fresh moss.

When packing the Roses for sending off a strand of thick Berlin wool should be tied round each bloom to keep it from expanding in transit. This should not surround the outermost ring of petals, but only the closer heart of the flower. It is well to have at hand a duplicate bloom of each variety exhibited, as accidents will happen, and it is annoying to have an entire entry spoiled by the lack of one bloom. The duplicate blooms should be rather less advanced than those chosen for

showing.

The art of "setting up" Roses for show is so artificial and complicated that it needs a treatise to itself; it is sufficient to say here that with the help of a camel hair brush the flower should be arranged into as perfect a shape as may be, and kept in position by constant care until the judges have seen it. Taste in arrangement and selection of blooms so that they may help each other without clashing or discord of colour will do the rest.

ENEMIES OF THE ROSE

Many and varied are the enemies of the Rose, and the Rose lover who hopes to keep his plants healthy and free from insect and fungoid enemies must be wary and vigilant. In the war he wages he will need patience and care, for only by unremitting diligence can a Rose garden of any size be kept free from all the thousand pests which will invade it. Of all the diseases which attack the Rose, perhaps the worst is mildew, and few indeed are the gardens which can boast themselves to be entirely free from it. It appears on the leaves of the Roses like a small spot of white, spreading from plant to plant with great rapidity. It must be checked at its outset, or all the plants will be infected in a short time, the spores of the fungus causing the disease being carried in the air as well as by birds and insects. The infection starts in the Spring from some patch of cotton-like mildew growing on the young shoots of the Rose, the Winter spores of this spreading to other parts of the tree and to the leaves when they appear. It is obvious then, that in order to prevent the spread of mildew great care must be taken to ensure the cleanliness of all shoots and stems in the Winter and Spring, every trace of white mildew being removed from them. In spite, however, of all care in this matter, it is almost impossible for all the Winter spores to have been destroyed—some are certain to have escaped, and these, unless checked, will spread the disease afresh. In order to check this spreading we must have recourse to spraying. This operation is in no way curative—it does not remove any disease when once established-but it can and does help to prevent the spread of the disease by leaving on the surface of the leaves a thin coating of such poisonous material that spores alighting on it are killed at once. Thus it is obvious that spraying is only valuable as a preventive so long as the material sprayed remains on the leaves, and that after a time it must be renewed if there is much fear of mildew. If the weather is fair, and the dew not unusually heavy, it will be sufficient to spray every fourth day in a garden badly affected with mildew, but, of course, should a sharp shower of rain come on immediately after spraying has been done, its good results will be almost neutralised, and it should be repeated as soon as may be. In using spraying solutions it must be remembered that the strength of the solution used depends on the tenderness or hardness of the foliage. A solution which will do no harm at all to the foliage of a plant growing in full sunlight and air, with leaves hardened by exposure, will shrivel and scorch the leaves of a plant growing in a damp, shady, sheltered position.

Mildew is more prevalent in certain seasons than in others, and this is due to the effect of the climate and weather conditions on the foliage of the Roses. Thus in wet years when all foliage is "soft" and tender, having missed the heat of the sun necessary for properly hardening it, the spores of the fungus find an easy prey. This accounts not only for the greater prevalence of mildew in damp summers, but also for the fact that some Roses are more liable to infection than others, and that in general those which are grown under glass are extremely susceptible to mildew. The two periods in which mildew is most likely to attack the plants are, first, in the Spring, when the new young leaves are just full grown, and again in the Autumn, when the plants are making their second growth. The Autumn epidemic is the more dangerous of the two, as it is from

this crop of fungus that the winter spores are produced which infect the plants in the following Spring. Spraying should be done frequently throughout the danger periods, and a good solution for this purpose, recommended by Mr Massee, is one part of commercial sulphuric acid diluted with one thousand parts of water. This must not be used full strength unless it is quite certain that the foliage is hard and ripe, and in any case it is well to begin with a weaker solution, strengthening it when necessary later. This is not very adhesive, owing to the large proportion of water it contains, and needs frequent renewal. It must be mixed in a wooden pail or tub, as the acid will corrode metal, and after using it a little pure water should be run through the syringe or sprayer to remove any acid. The finer the spray employed the better, as it will not so quickly run off the foliage.

Dusting the whole plant with flowers of sulphur by means of a fine muslin bag is a good means of checking the mildew, where for any reason spraying is impossible, and this should be done on a calm fine evening as soon as the mildew is observed, repeating it at intervals until

no trace of the fungus can be seen.

Rose rust is another of the pests of the Rose garden, though by no means as common as mildew. It appears as an orange-coloured spot on the leaves, hence its other name of orange fungus. It affects the wood also, and when the patch is large and neglected sometimes causes curvature of the stem at the affected place. When the fungus dies away in the winter it leaves large wounds in the wood, which serve as harbourage for other sorts of fungi. The winter spores are produced on the leaves, so that it is most important in cases of this disease that all affected leaves should be collected when they fall, gathered into a heap and burnt. Rose trees that have been affected with rust should, in the following Spring,

when the leaves are expanding, be sprayed with a solution of potassium sulphide, and where rust marks exist on the wood they should be treated with equal parts of methylated spirit and water, rubbed well in with a bit of sponge.

Black spot, the appearance of which is described by its name, is the third of the commoner diseases of the Rose. It is treated in the same way as Rose rust, by burning all infected leaves and spraying with potassium

sulphide or some other good fungicide.

One of the chief of the insect enemies of the Rose is the green-fly or aphis. These insects, if they are treated and dealt with drastically on their first appearance—the finger and thumb being the instruments employed—may be easily kept in bounds, but if they are once allowed to get a start, more serious measures are called for. Sharp syringing with plain water, or water mixed with a good insecticide, always remembering not to use it too strong, will be found effective. One of the best washes for green-fly is the following: One pound of quassia, half a pound of soft soap, and ten gallons of water; this to be sharply sprayed or syringed on to the affected shoots. The spraying should be done on two successive days so that both the parents and the young may be killed.

The aphis has many natural enemies, and the wise Rose grower will not discourage these from frequenting his garden. They include the lady-bird, which both in the larva and the perfect stages devours the aphides ravenously; the lace-wing fly, who lays her eggs on curious long stalks, and is another helper, as her larvæ eat an incredible quantity of the aphides, sucking their juices and picking them off the leaves by means of special sickle-shaped jaws; and various other flies which are of great assistance in keeping down the green-fly. These

two, however, are the chief among them.

The best way of ridding the plants of grubs and

caterpillars of all kinds (and there are many which afflict the rose) is to keep a careful eye open for curled leaves, holes in young foliage, and other signs of the enemy, and crush the insects at once with the finger and thumb. Every curled-up leaf is almost certain to harbour an enemy, and should be picked off and destroyed.

A LIST OF GOOD ROSES FOR GARDEN CULTIVATION

THE following roses are recommended by the National Rose Society for general cultivation, where the grower's object is to obtain beautiful plants and good flowers, but not especially to produce blooms for exhibition.

HYBRID TEAS

Antoine Rivoire.—A very handsome and vigorous Rose, the petals rosy flesh colour, with their bases yellow.

Caroline Testout .- Bright fresh rose colour, very sweetly scented. This Rose does well in the neighbour-

hood of towns, and is a vigorous grower.

Earl of Warwick .- Salmon pink, shaded darker in the centre, a very well-shaped and individual Rose, flowering well both in Summer and Autumn.

strong grower.

Grand Duc Adolphe de Luxembourg.-Flowers rosy red, with the backs of the petals bright crimson, the two colours being quite distinct. Strong grower, and a good Rose for all purposes.

Gustav Grünerwald-The buds of this Rose are yellow, tinted with orange and rose, the flowers being rosy carmine with centres tinged with yellow. A strong

grower.

Joseph Hill.—This Rose is beautiful both in bud and when the flowers are open, the outside of the petals being coppery pink, and the inner side salmon pink, shaded with yellow.

La France.—This Rose hardly needs description. It is one of the loveliest of Roses, its perfume alone well distinguishing it from its sisters. It is a beautifully shaped Rose, in colour pale peach pink, the centre being slightly darker and rosier. This Rose does well near towns.

Lady Ashdown.—This is a pale pink Rose, with the bases

of the petals shading to yellow.

Mme. Abel Chatenay.—This is a pale rosy salmon-coloured flower, shaded to a darker rose at the bases of the petals, and tinged with a pale scarlet rose. A good town Rose.

Mme. Jules Grolez .- A good Rose, with a fine satiny texture of petal, in colour like the pink china Roses, and well shaped. It flowers very freely, is very vigorous in habit, and does well near towns.

Mme. Melanie Soupert .- A yellow Rose, slightly salmon tinted, and shaded in places with carmine pink. The blooms are very large, well shaped and

double.

Mme. Ravary.—The buds of this Rose are bright yellow, the flowers when open being nankeen vellow, and very striking. This is a good decorative Rose, and a strong grower.

Pharisaer.—A rosy white flower, shaded with rosy salmon, with long well-shaped buds, excellent for cutting. It does well near towns, and is very

vigorous in habit.

Prince de Bulgarie.—Silvery flesh colour, shaded with salmon and pale rose, and deepening in colour in

the centre. A distinguished Rose.

Richmond.—This is a good scarlet red Rose, rather like

Liberty. A vigorous grower.

Viscountess Folkestone.—Creamy pink, the centre shaded with salmon pink, very sweetly scented, and with well-shaped flowers. This does well near towns.

TEAS

- G. Nabonnand.—A pale pink Rose, shaded with yellow, with very handsome buds and large well-shaped petals. It is a very free bloomer, and vigorous in habit
- White Maman Cochet .- This has snowy white flowers, tinged with palest blush pink or cream. It is of vigorous habit. A lovely and distinct variety.

Hybrid Perpetuals

- Commandant Felix Faure .- A rich, deep crimson Rose, shaded with scarlet and very dark red. A beautiful flower, and very well shaped. A strong grower.
- Frau Karl Druschki.—This is perhaps the most beautiful Rose we have, its one great drawback being that it is quite scentless. It is snow white, beautifully shaped and full with long handsome buds, and the plant is handsome and a vigorous grower. It does well near towns.
- Hugh Dickson.—Brilliant scarlet and crimson. An excellent Rose, and a vigorous grower.
- Mrs John Laing.-A large, very fragrant, soft pink flower. It has many good points, among them being its exceptional fragrance, its early blooming. its profusion of flowers, and its vigorous habit. It does well near towns.
- Mrs R. G. Sharman Crawford. A deep pink flower, the outsides of the petals shaded with pale flesh colour, and the bases of the petals white. It is a distinguished Rose, a strong grower, and does well near towns.
- Ulrich Brunner .- A bright red Rose, with large full flowers, good for cutting, and a vigorous grower. It does well near towns.

GOOD ROSES FOR STANDARDS

The following are good Roses for growing as standards. for which purpose those of vigorous habits are necessary. The kinds given here are all well suited to this purpose, and have been marked according as their flowers are individually large or small.

Captain Hayward (H. P.).—Bright carmine red, and very fragrant. An early bloomer of very good

shape, with large flowers.

Caroline Testout (H. T.).—Described above. Large

flowers.

Corallina (T.).—A deep rose crimson, shaded with coral, with lovely buds. This Rose blooms until very late in the Autumn, often flowering profusely till cut off by frost. Small flowers.

Fisher Holmes (H. P.) .- A very fine red scarlet, shaded with velvety dark crimson. Very well shaped and vigorous. A lovely Rose. Large flowers.

Frau Karl Druschki (H. P.).—Described above. flowers.

Frau Lilla Rautenstrauch (H. T.).—This has lovely buds of copper and orange, with flowers of rosy flesh colour, shaded with orange. Large flowers.

G. Nabonnand (T.).—Described above. Small flowers. Gustav Grünerwald (H. T.). Described above. Large flowers.

Hugh Dickson (H.P.).—Described above. Large flowers. La France (H. T.).—Described above. Large flowers.

La Tosca (H. T.).—An effective Rose, a free bloomer, with flowers of pale silvery rose colour. Large flowers.

Mme. Abel Chatenay (H. T.) .- Described above. flowers.

Mme. Antoine Mari (T.) .- Flowers, rose-colour, shaded and suffused with white, the buds fine in shape and

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excellent for cutting. A vigorous grower. Small flowers.

Mme. Chedane Guinoisseau (T.) .- A bright canary yellow Rose, with lovely buds and well-shaped blooms. This Rose does well near towns, and is a very free bloomer. Small flowers.

Mme. Jean Dupuy (T.).—Yellow and rose, shaded with darker red and yellow. A very striking Rose.

Small flowers.

Mme. Ravary (H. T.) .- Described above. Small flowers. Marquise de Salisbury (H. T.) .- Brilliant red, with good long buds, and excellent for cutting. Small flowers.

Marquise Litta (H. T.).—Flowers of carmine rose with a brighter centre, well-shaped. Large flowers.

Mrs John Laing (H. P.) .- Described above. Large flowers.

Peace (T.).—A pale lemon-coloured Rose, with large well-shaped petals. A striking Rose. Small flowers.

Prince de Bulgarie (H. T.) .- Described above. Small

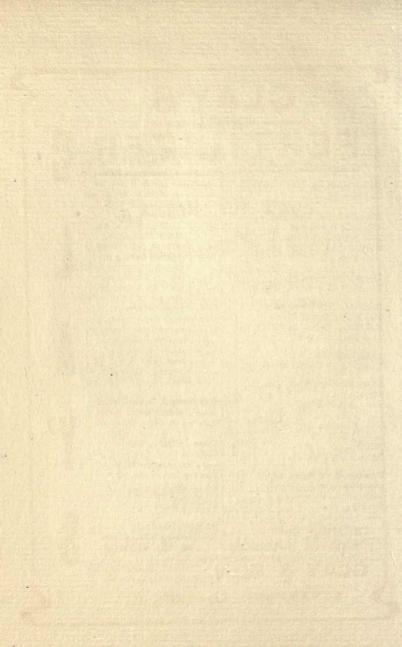
White Maman Cochet (T.) .- Described above, Large flowers.

William Allen Richardson (N.).—The well-known Rose of copper yellow and orange. Very fine both in bud and flower. Small flowers.

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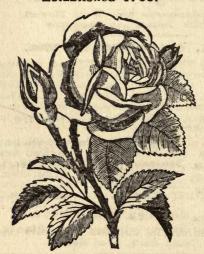
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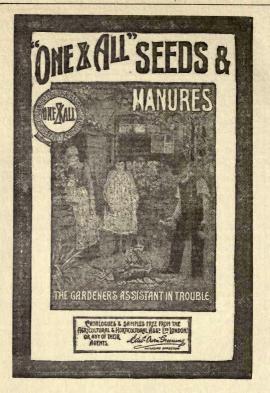
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