MARECHAL NIEL ROSE.

(With Coloured Illustration.)

BY GEORGE GORDON.

HE popularity of Maréchal Niel rose is fully accounted for by its splendid qualities. The rose garden is rich in yellow roses; but this, the latest of the series, surpasses them all in the vigour of its growth, comparative hardiness, and the profuse production of its large,

finely-formed, and richly-coloured flowers. It is already grown most extensively in the gardens of all classes; but at the present moment it is not grown so largely or as well as one might expect, and this is mainly owing to the existence of the belief that it requires a special system of culture. This I believe is entirely without foundation, for it conforms most readily to the excellent rules laid down in Mr. Hibberd's popular "Rose Book" for the cultivation of yellow roses. Indeed, so clearly do the directions in that work for the cultivation of yellow roses apply to this splendid rose, that, excepting for the assistance of those readers who have not the "Rose Book" to refer to, it is quite unnecessary to say anything about its

management.

Maréchal Niel rose is occasionally classed in the trade catalogues with the tea-roses, but it is unquestionably a Noisette, although it has a strain of tea blood in it, and is, perhaps, the hardiest of its Throughout the southern and midland counties it can be grown out-of-doors in the greatest perfection, and with but small risk of its being cut off by the winter's frost. In the north it can also be grown moderately well in a warm position against a wall, but the chances are that about every third or fourth winter it will be cut down to the ground even with considerable protection. It is on record that in the neighbourhood of Derby it withstood the effects of the severe winter of 1866-67 without injury, but it is very certain that in Yorkshire it is killed with the thermometer considerably above zero. In sheltered nooks of such favoured spots as Worthing and Bonchurch, Isle of Wight, it will be found quite at home, and at this moment I have in my mind's eye a cottage in the Isle of Wight that on one side is covered with a single plant, which throughout the early part of the summer is fairly loaded with grandly-developed flowers, thereby proving, in the most unmistakable manner, the fact that in favourable situations it is quite at home in the open air.

Whether grown under glass or against a wall out-of-doors, the details of management will not be found to differ materially. At the commencement, strong plants on their own roots should be selected, as preferable to those on the brier or Manetti stock; but if there is any difficulty in securing them on their own roots, those worked on the brier must have the preference. Some rosarians act upon the belief that it is not well able to support itself on its own

roots, whereas there is not another rose in cultivation that will do better on its own roots. As a proof of this, it is only necessary to refer to the gigantic specimen in the nurseries of Messrs. Kelway and Son, at Langport, Somerset. Last year this specimen covered the back wall and roof of a large orchard-house to a length of forty feet, and it would have extended over a greater portion of the wall and roof if the space could have been spared for it. Although it had only been planted out three years, it produced upwards of one thousand flowers last year, besides furnishing sufficient cuttings for the propagation of five hundred plants for trade purposes. It is true the large specimen in the nurseries of Mr. Harrison, at Darlington, which produced three thousand blooms during last year, and covered in December last an area of nearly 650 superficial feet of the roof of the house in which it is planted, was worked upon the Manetti; but immediately it was turned out of the pot it pushed out roots of its own accord, and may be virtually considered on its "own roots." Of the vigour of this rose there appears to be very little limit, for last year the Darlington plant above referred to produced a shoot twenty-four feet long, and there is no telling what length it would have attained had not its progress been accidentally checked.

The best way of cultivating Maréchal Niel under glass in private gardens is to plant it in a border or large pot or box, and train it just under the rafters of the conservatory or greenhouse, unless there is a rose-house such as that figured in the "Rose Book." In the latter case, the rose-house will be the most appropriate place for it, although it is entitled to rank high as a conservatory climber. Sound turfy loam and partly-decayed manure chopped up roughly, and incorporated together at the rate of three parts of the former to one of the latter, forms a most excellent compost, and a more suitable mixture does not appear possible. A few bones broken up moderately will be of considerable service in maintaining the fertility of the soil, and if there are any available for that purpose they should be utilized. When it is necessary to use pots or boxes, let them be of a large size, for it will be difficult, if not impracticable, to repot them when trained to the roof; but when growing in large pots they can, with the assistance of annual top-dressings, be kept in a most healthy condition. The drainage, which may consist of crocks or broken bricks, must in every case be sufficient to carry off the superfluous moisture within a reasonable time.

Rosarians differ somewhat in their opinions as to the manner in which the Maréchal should be pruned, and some go so far as to assert that it should be pruned in the most moderate manner only, whilst others contend that it may be pruned severely. It is an easy matter for any one practically acquainted with the matter to effect a reconciliation between the two extremes, for in the one case allusion is made to the long rods which healthy plants will produce, whilst in the other the lateral growth is referred to. In reality, this rose requires pruning in much the same manner as other stronggrowing varieties, for the strong rods require to be simply shortened back to a moderate extent, whilst the lateral shoots must be cut back to the first or second bud; and, in addition, all weak shoots

must be entirely removed to prevent overcrowding. It must be understood that, if the long, vigorous shoots are pruned severely, other strong shoots will be produced; whilst, on the other hand, if the tops are simply taken off, and the rods placed, as far as practicable, in a horizontal position, laterals bearing flowers will push from nearly every bud, and a grand display of colour be the result.

CULTIVATION OF HARDY FERNS UNDER GLASS.

BY J. JAMES,

Head Gardener, Redlees, Isleworth, W.

HE outdoor fernery may be justly considered the proper place for the cultivation of British and hardy exotic ferns, but they are so exceedingly beautiful when grown under glass, that a collection should be grown indoors in all gardens where room can be found for them. In

point of beauty, the fine varieties of the Lady Fern, the Male Fern, the Hart's Tongue, and the typical Polystichiums are unsurpassed by any of the exotic species, and, moreover, they can be most successfully cultivated without the assistance of any artificial heat, which at this moment is a matter of considerable importance. They, therefore, have special claims upon the attention of the amateur with limited means, and I will as briefly as possible point out the way by which they can be most successfully cultivated.

In the first place, it must be said that there are two ways of growing hardy ferns under glass; one, planting them out on a wellprepared rockery, and the other in pots. They certainly have a very attractive appearance when judiciously planted on a rockery, but for the amateur it will, perhaps, be more desirable to cultivate them in pots. By having them in pots it will be practicable to fill the house with other hardy plants, if it is unheated during the winter and spring, for the ferns may be wintered out of doors, provided they are placed in a sheltered corner, and protected from severe frosts by means of liberal coverings of long litter or the common dry fern. Protection of some kind is absolutely necessary to prevent the frost splitting the pots, and possibly injuring the roots by reason of the manner in which they will be exposed to it. A goodly collection may be grown in a deep frame or pit, but it is more desirable to have them in a span-roof or lean-to house of medium size, because of the greater facility with which they can be inspected and attended to. In either case the structure should be on the north side of a wall or building, so that the plants may enjoy the fullest exposure to the light without the possibility of the sun injuring them. It will also be less difficult to maintain a cool and moist atmosphere about them in the hottest weather. They can, of course, with the assistance of shading materials, be grown in span-roof houses occupying exposed positions or lean-to's, having other aspects than the north, but the

north aspect is decidedly preferable.



NOISETTE ROSE -- MARECHAL NIEL