ROSES Developed for Dooryard Are Still Far From Well Known

Roses for the dooryard are rarely roses for the rose garden. In the latter place, where the plants are grown as an exhibition crop, for a show of flowers, or for the production of flowers for cutting, perhaps the most pampered crop the ornamental gardener handles, there is little place for the robust shrubs and climbers which will survive the less careful methods of the dooryard. The dooryard rose must grow luxuriously even without spraying and fertilizing, with rare or even no pruning, and provide at least one seasonal flowering, good foliage throughout the year, and handsome fruits, if possible. Before such requirements the ordinary hybrid tea rose goes down in defeat, and it is the approximation of this schedule that makes the Radiance

FIGURE 203.—The Mary Wallace rose, a popular new climber

variety and its red counterpart such popular favorites over large areas of the country.

From the wild roses which combine these qualities in largest measure, *Rosa rugosa*, *R. wichuraiana*, and *R. multiflora* have been evolved most of the hardiest roses of to-day, and it is from these that the late Doctor Van Fleet created some of the most successful roses he produced, combining them with various hybrid teas to secure finer and more continuous flowering. The earlier sorts are now well established in the trade, but his later creations which have been released by the Department of Agriculture for introduction with the cooperation of the American Rose Society are still far from well known.

The Mary Wallace variety (fig. 203), which is a complicated hybrid involving both *wichuraiana* and hybrid tea blood, has combined the vigor and hardiness of the wild species with the more elegant foliage and flowers of the hybrid tea ancestors. In addition it shows a tendency to autumn flowering which is not overcommon among the hardy climbing roses. In 1928 Mary Wallace was voted first place

among the newer climbers by members of the American Rose Society, which shows that it is valued as well by more critical rosarians.

Heart of Gold is also a climber, but of more bushlike habit, and resembles somewhat in bloom the earlier American Pillar; but its single flowers are deep purplish crimson with a white center somewhat overshadowed by the center of golden stamens. In the autumn its huge panicles of scarlet hips are almost as attractive as the flowers.

FIGURE 204.—A cluster of blossoms of the Glenn Dale rose. The buds of lemon white fade to pure white as they open

Glenn Dale Another Strong Climber

Glenn Dale (fig. 204), the third of the trio of strong-growing climbers, is perhaps the most beautiful of them all, with admirable dark foliage and finely modeled buds of lemon-white color, fading to pure white as they open. This rose was awarded a certificate of merit at the Bagatelle Rose Garden in the summer of 1928, and it should supplant

the admirable Silver Moon, which frequently is too rampant for ordinary quarters and which has lovely but very ragged flowers as compared to Glenn Dale.

A fourth climber, of very different habit and qualities, is Breeze Hill, which for all practical purposes should be considered a climbing Pernetiana. It is less rampant in habit but makes a sturdy bush when once established, and is useful in smaller quarters than the other climbers. The flowers are very fine, full double, and perfectly formed. In color they are a tender flesh pink stained with yellow and rose through the center. In addition they mature somewhat later than most climbers and so prolong the flowering season.

The two bush roses that the department has released for introduction are both hybrids of *Rosa rugosa*, one named Sarah Van Fleet for the originator's wife, and the other E. M. Mills for the distinguished rosarian. The first is a robust bush of typical *rugosa* character with abundant semidouble flowers of clear rose pink which are produced freely in the spring and sparingly through the remainder of the year. The original bush, now over 15 years old, still stands on the old Van Fleet place, a plant more than 8 feet high and almost as much in diameter, and flowers abundantly each year. This variety rarely fruits. The second is a very different type, although the foliage and stems are much like *rugosa*. The flowers, however, are borne singly on short lateral branches, all along the stems, so that one has long wreaths of bloom rather than terminal clusters. They are somewhat smaller than typical *rugosa*, semidouble, yellowish white tinted with rose on the edges. This variety also rarely fruits, but its abundant dark foliage makes this an admirable screen or low hedge plant.

B. Y. MORRISON.

ROSIN When Poorly Strained Is Much Reduced in Quality

It is conservatively estimated that poorly strained rosin annually costs the producers half a million dollars and the users of rosin at least a million dollars for additional processing and loss of material, and in the decreased value of the rosin. The demand for brilliant, clean rosin, entirely free from dirt and specks of all kinds, is greater than ever before. The development and application of better methods of straining therefore is a real need of the naval stores industry.

Dirt in rosin is costly for several reasons. The presence of dirt makes rosin unfit for some purposes for which it would otherwise be suitable, and thus curtails the uses for rosin. The dirt must be removed to keep it out of the products made from rosin, and this cleansing process is expensive. But most important, dirt degrades the rosin, making it a grade lower than it would be had it been properly strained. It is not primarily the large, readily settled, and separated particles that cause the greatest loss, but rather the fine pieces of bark, sand, and clay that are hardly visible in the most critical examination that are most harmful and give the most trouble.

These facts have been fully established by the laboratory work in the naval stores section of the Bureau of Chemistry and Soils. Straining practices must be efficient before the naval stores industry can be on a sound basis. A study of the straining of the gum both before and after distilling is the first major problem to be worked out to a