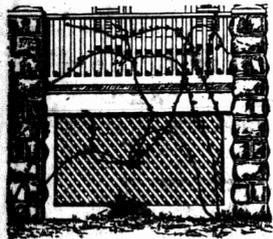


Why Not Raise Some Beautiful Roses This Summer?—Here's How

By F. L. Mulford

Perhaps the most admired and the oldest of cultivated blossoms. If you will take the trouble to care for several bushes you can add much to the attractiveness of your home during the coming warm season.

The rose has probably been cultivated as long as any ornamental plant, and it holds a warmer place in the hearts of the people than any other flower. From earliest times it has been a favorite. It has figured in the literature of all ages and all nations. People in all stations of life yield homage to its beauty of form and color and to its delicious fragrance. It is loved by poor and rich alike. It is grown in the door-yards of the least pretentious cottage, where often the occupants are stunted in food and raiment as well as on the grounds of large estates, where abound the choicest things that money can buy. It is also grown in immense quantities under glass and is the most popular winter cut flower for all occasions. So deep a hold has it on the



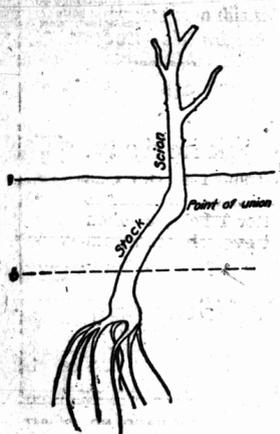
Climbing Roses After Pruning.

affections of the people that it is often spoken of as the "queen of flowers."

Wild roses abound in great variety over practically all the temperate regions of the earth. Man has taken advantage of this and has appropriated the most pleasing wild forms for his use. In addition, he has so modified and improved the wild sorts by breeding and selection that now there is a rose for every need.

Lawn and Border Roses. Selection and breeding have been practiced with this best loved of all flowers for ages, and have resulted in the development of a multitude of rose varieties, some of which are adapted to use under almost any conceivable conditions. By familiarizing himself before the planting seasons in fall and spring with the different types of roses and the purposes for which they are especially suited, the rose gardener in city or country may add greatly to the attractiveness of his home.

Roses for use on lawns and along borders must have habits of growth and foliage which fit them particularly for mass effects. Foliage, in fact, is more to be desired under such conditions than fine flowers, since it is a feature during the whole growing season, while the flowers may cover a period less than a fortnight in length. When suitable sorts are chosen, roses are quite as appropriate and effective



Proper depth for planting: (a) proper soil level for grafted or budded rose; (b) soil level if the plant were on its own roots.

for use in relief planting about the ground line of buildings or in masses upon the lawn or along borders as other ornamental shrubs. For such use, however, they must be hardy and moderately free in growth, and must possess foliage reasonably disease resistant and free from insect attack.

BAD ODORS HAVE VIRTUES

They Give Warning of Presence of Disease Breeding Matter and Prevent Epidemics.

Even a bad odor has its uses. Scientists say that the offensive smell which comes from decaying and disease breeding matter is in reality one of nature's measures of preparedness and of prevention. Offensive odors indirectly prevent the spread of epidemics by calling attention to the breeding place of the disease, the Louisville Courier-Journal says. They give warning that something is wrong and they persist in this warning by becoming more and more offensive until the wrong is righted.

varieties are relatively tall, reaching a height of from 6 to 8 feet. The Rosa lucida, a wild type native from Pennsylvania north, is, on the other hand, desirable for a low ground cover 2 to 3 feet high. It grows well at the seaside and under other adverse conditions. The Prairie rose has a wider range than any of the other roses named above, being native from Canada to Florida and west to Wisconsin, Nebraska and Texas. It is a single variety and thrives under adverse conditions. Among the other roses which may be particularly useful for landscape planting are the Arkansas rose, Sweet Brier, Rosa eglanteria or Rosa lutea, Dwarf Polyantha, Cabbage rose, and the Damask rose.

The roses classed in the lawn and border group are adapted to a wide range of soil conditions and may be counted on to succeed in any but extremely heavy or very sandy soils. Many of them will do well even on such soil types. The principal essentials are thorough drainage and a plentiful supply of organic matter, with a reasonably constant water supply during the growing season. In general a soil capable of growing good garden or field crops is suitable for roses. The deeper the soil and the better the preparation at the beginning, the more satisfactory will be the results.

The best fertilizer for roses is rotted cow manure, though any other well-rotted manure or good compost will serve the purpose. Fresh manure, especially horse manure, should be avoided, though if no other manure is available it may be used with extreme care. It must not come in direct contact with the roots when planting nor should any quantity of it be used immediately beneath the plant to cut off direct connection with the subsoil and the water supply. Of the commercial



Roses Pruned for Individual Bloom.

fertilizers, ground bone is excellent as additional food. It will not, however, answer as a substitute for an abundant supply of compost. Cottonseed meal, where it is cheap enough, may be used as a substitute for bone. Wood ashes are sometimes a helpful addition, or when they are not available, lime and muriate of potash may be used and should be applied separately. Rose growers having only sandy soils should make more frequent applications of manure than those dealing with the heavier soils, since the organic matter burns out more rapidly in a soil rich in sand.

The chief consideration in the planting plan for roses for landscape effects is that the plants should be so spaced that when they reach maturity they will come together without overcrowding. The habits of growth of the particular varieties chosen will be the determining factor. The spacing should in general range from 2 to 6 feet. Early spring planting is best in the extreme northern part of the United States and on the western plains where there are strong drying winds in winter. In other regions fall planting is advantageous but not sufficiently so to warrant postponing planting from spring until autumn. When possible, however, it is well enough to push planting in the fall rather than to wait until spring. Spring planting should be done as soon as the ground is dry enough to work, or when it springs apart after being squeezed in the hand. Fall planting is best done as soon as the leaves have fallen from trees and bushes.

Planting methods for border and lawn roses apply also to practically all other roses. Stock should be planted as soon as possible after it arrives. When it is impossible to plant immediately, the plants should be placed in a trench and the roots covered. If the plant roots are dry when received, soaking them in water an hour or more before this heeling-in is done is desirable. If the stems are shriveled, plumpness may be restored and growth insured by burying the whole plant for a few days. If the plants are

frozen when received they should be placed where they will thaw gradually and should not be unpacked until there is no question that the frost is out.

More plants are killed by undue exposure of roots at planting time than from any other cause. No matter how short the distance to the permanent planting location, plants should be taken there with the roots thoroughly covered. The roots may be placed in a bucket of water while removing to the planting ground and until planting, or they may be puddled in a mixture of thin clay and then kept covered with wet burlap or other protection. Care should be taken that the clay does not become dry before



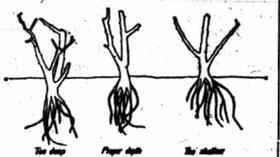
For Cut Flowers Nothing Can Rival the Beauty of the Rose.

planting. It is important to set the plants a little deeper than they were before. If planted too deep, however, the bark of the buried stems would be injured and growth would be checked until new roots form nearer the surface.

In planting dormant bushes it is desirable to trim the ends of broken roots and any that are too long just before they are put into the hole, so that there will be smooth, fresh surfaces which can callus and heal over.

It is usual to have this fresh-cut surface on the under side of the root. The hole in which the bush is to be planted should be several inches larger across than the roots will extend and ample in depth, with a little loose earth on the bottom. The roots should be separated well in all directions with the soil well worked in among them, separating them into layers, each of which should be spread out like the fingers of the hand. When the hole is partially full, the plant should be shaken up and down so as to make sure it is in close contact with the soil under the crown where the roots branch. When the roots are well covered the soil should be firmed. This is best done by tramping. If the soil is in proper condition tramping cannot injure the plants. This will leave a depression about them, but all the roots will be covered.

When all are planted, each one may be watered, although this usually is not necessary, especially if the roots have been puddled before planting. If water is applied, permit it to soak in about the roots and then fill the hole with dry earth. Do not tramp after watering. With the soil wet it would be injurious to compact it more. If not watered the depression should be filled with loose earth the same as though it had been watered. After planting no watering should be done



Proper and improper depths of planting roses. The line indicates surface of soil.

unless very dry weather follows, and even then care must be exercised not to overdo it till after growth starts. In watering, it is desirable to draw away some earth from about the bush, apply the water, and after it has soaked in draw dry earth about the plant again.

The purposes for which roses are planted largely will determine the pruning methods to be employed. At the time of planting border and lawn roses one-half to two-thirds of the wood should be removed. At later prunings weak branches should be taken off, and long canes that would be liable to whip around and loosen the plant should be cut back. As far as practicable, pruning other than this should be accomplished by cutting off whole branches rather than by cutting off the ends. After the first year, pruning should consist of removing dead, dying, or weak wood, and crossing branches, including any that may be found with discolored pith. Cutting off the ends of branches should

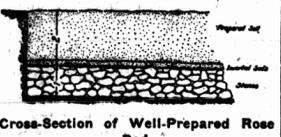
be avoided. Most of the roses suggested for border planting are improved by having the whole top cut off every five or six years. All pruning of these roses should be done in the spring, as summer or fall pruning would remove the hips prematurely and thus rob the plants of much of their attractiveness during the winter.

Border and lawn roses are hardy and need protection only under extremely trying conditions. In the arid plains region, if the autumn has been exceptionally dry, it may be advisable the first winter to provide a good mulching after the soil has been thoroughly soaked. Covering will be unnecessary.

Roses for the Arbor and Trellis. The character of the foliage and hardiness should be important considerations in choosing types of climbing roses for covering arbors, trellises, pergolas, pillars and similar structures. Roses used in this way are usually in conspicuous places and flowers can be depended on for ornamental effects for a relatively short period only during the year. Climbing roses with a poor leaf development or those especially liable to attack by insects and diseases, therefore, make but a poor appearance. The climbing roses are divided roughly into two divisions. The pillar roses are those not growing more than 6 or 8 feet high. The more vigorously growing roses of the group are the climbers or ramblers.

Of the trellis and arbor roses the members of the Wichuriana or Memorial group are among those most resistant to disease and insect attack. They have foliage pleasing to the eye throughout practically all seasons. The blossoms are white and single. The Multiflora climbers flower in clusters. Many of them, however, especially the so-called ramblers, are subject to mildew and insect attacks. They are reasonably hardy in the North. Roses of the Laevigata group, represented by the Cherokee, on the other hand, require a warm climate. This is true also of the roses of the climbing Noisette group represented by the Marechal Niel and Lamarque. These roses are suitable for culture only in the warmer sections where the winter temperature seldom falls below 40 degrees F. above zero.

Climbing roses require large quantities of plant food. The body of good soil available should be equal to a mass 3 feet square and 30 inches deep. A hole of this volume should be dug and filled with good garden soil mixed with well-rotted manure. Climbers, like all other roses, require good drainage. No roses will thrive where water stands about their roots. Plant-



Cross-Section of Well-Prepared Rose Bed.

ing should be done carefully as in the case of roses for landscape purposes. This method has already been described.

Special pruning methods must be employed for climbing roses. These methods are determined by more or less of a compromise between the desire, on the one hand, to force the growth of blossom-bearing, new wood, by removing old wood, and, on the other hand, the desire to keep arbors and similar structures at least partially covered. One-half of the wood should be pruned from all the climbers, as from the other types of roses, at planting time. In the case of the established plants the Wichuriana and hardy climbing roses should be pruned just after blooming. At this time young shoots will have started from the roots. The growth of these shoots should be encouraged, as it is from them that most of the branches are produced that bear the following year's bloom. The best way is to remove all the old wood at this time, so that all the strength will go into the young shoots. Where the roses are trained over a trellis so high that one season's growth will not cover it, the method just described is not practicable. In such cases some of the old shoots should be cut off at the ground, and the others should be shortened from 3 to 6 feet, depending on the amount of growth the vine has been making each year. New shoots should be trained to take the place of those removed. It should be kept constantly in mind that the present year's growth bears next year's flowering branches and that a few vigorous branches are more desirable than many weak ones.

Roses of the hybrid Noisette group, of which the Marechal Niel is a representative, should be trained to a good strong cane, with the side shoots cut back to about three eyes. The main cane can be renewed occasionally.

The Cherokee rose should be treated like the border roses, pruning only dying or crossing branches. Every few years it may be cut back severely and allowed to start again.

Overdoing It.

Homer—When it comes to cleanliness my wife is the limit.
Neighbors—Indeed!
Homer—Yes; she even scrubbed the coal bin last week before she would let the man dump the coal in.

Had His Number.

He (patronizingly)—You know, there's something about you that I like.
She—Yes, and I know what it is. It's you.

TREATY IS KILLED

PACT WITH COLOMBIA WITHDRAWN IN SENATE BY CHAIRMAN STONE.

ASKED \$25,000,000 PAYMENT

Believed That Plan for Agreement Which Will Be More Acceptable to Republicans Will Be Offered—Action Approved by Wilson.

Washington, March 19.—The treaty with Colombia, to pay \$25,000,000 for the partition of Panama was withdrawn from the senate on Friday on motion of Chairman Stone of the foreign relations committee and will not be acted upon at the present special senate session.

Senator Stone's action was taken to foreshadow further diplomatic negotiations with Colombia for a new treaty, which would not be received with such strong objections. An effort to frame a more acceptable treaty is expected before the congress, which convenes in special session April 16, has adjourned.

Withdrawal of the treaty was expected in view of the announcement that President Wilson wished the treaty ratified because of the situation in which the United States might find itself in Central America.

The attitude of the administration in the withdrawal of the treaty was not openly disclosed, but it was apparent that such action would not have been taken without a previous understanding. Sudden withdrawal of the treaty with Colombia and postponement until the session of April 16 is explained by developments disclosing an offer of Colombia to reconsider certain provisions as to condemnation of Roosevelt's course in taking Panama, also to reduce amount of award and particularly to add provisions allowing extra fortifications on the coast of Colombia by the United States and an agreement not to allow any European or Asiatic nation privileges of naval or military base without the consent of the United States.

U. S. SAILORS ROUT REBELS

Americans From Gunboat Eagle Drive Cubans From Altoledo—Mexicans Aid Insurgents.

Havana, March 19.—United States sailors from the gunboat Eagle landed at Altoledo, in Oriente province, and drove a group of insurgents from the town. It was reported that many Mexicans were in the group, which numbered about 300 men. American marines are believed to have evacuated the port of Santiago. They landed when the rebel forces quit the town. Since then Cuban government troops have assumed control.

The presence with Cuban insurgents of Mexicans caused much surprise and speculation here. There are Mexican colonies in some parts of Cuba, but heretofore no activity of Mexicans, skilled in revolutionary and destructive warfare in their own country, has been reported to government officials here.

Railroad bridges destroyed by the rebels between Havana and Camaguey have been restored. Passenger and freight service will be resumed immediately.

J. M. STUDEBAKER IS DEAD

Founder of Famous Firm Succumbs at South Bend, Ind., After a Long Illness.

South Bend, Ind., March 19.—John M. Studebaker, Sr., founder of the vehicle manufacturing concern bearing his name, died here on Friday night at his home following a long illness.

Mr. Studebaker was born near Gettysburg, Pa., October 10, 1838, the son of a blacksmith. He was one of 13 children. In his youth he moved with the family to Ashland county, Ohio, and later to South Bend, Ind., which city later became the seat of the Studebaker corporation.

On January 2, 1890, Mr. Studebaker married Mary J. Stull, the daughter of a farmer living near South Bend, Ind. From this union there were born three daughters and John M. Studebaker, Jr.

SIX KILLED BY EXPLOSION

Every Man in Aetna Factory Building Is Dead—Fire Extinguished.

Olean, N. Y., March 18.—Six men were killed in an explosion which destroyed the solvent factory at the Howard plant of the Aetna Explosive company at Emporium, Kan. Simultaneously with the explosion fire was discovered in the cotton storage building, half a mile away.

Drops "German" in Bank's Name.

Los Angeles, Cal., March 20.—The German-American Trust and Savings bank filed a petition in the superior court asking a permission to change the name to "Guaranty Trust and Savings bank."

Diver Rammied by Patrol Boat.

New York, March 20.—A British patrol boat pounced on and sank a German submarine which launched a torpedo at the White Star liner Lapland as it was putting into Liverpool on its eastern trip.

Troops to Protect Canal.

Washington, March 19.—A battalion of the United States infantry, now stationed in Porto Rico, will be rushed to the Panama canal to re-enforce the guard of that waterway without delay. It was learned at the war department.

British Destroyer Hits Mine.

London, March 19.—A British destroyer of an "old type" struck a mine in the English channel and sank with 20 members of her crew, the admiralty announced. All of the officers were saved.

WHEN GANDER TOOK CHARGE

Housed His Flock Every Night to Escape the Foxes, Relieving Owner of Job.

W. H. Hudson's "Adventures Among Birds" contains this story of genius asserting itself:

On a certain small island on the coast of Norway the geese used to congregate every year in large numbers, and here one autumn some years ago a goose was caught by the leg in a steel trap set for a fox. The keeper from a distance saw the whole vast gathering of geese rise up and circle round and round in a cloud, with a tremendous outcry, and when he got to the spot he found the bird struggling violently in the trap. He took it home to a larger island close by, where his master, my informant's friend, had a farm. From that day the wild geese never settled on the islet, which they had used as a resting place for many years.

The bird he had accidentally caught was an old gander, and its leg was broken; but the keeper set to work to repair the injury, and after binding it up he put the bird into an out-house, and eventually it got quite well. He pinioned it and put it out with the other birds. A little while before the old gander had been caught the foxes became so troublesome at the farm that it was found necessary to shut up all the birds every night in inclosures and houses made for the purpose; and as the birds preferred to be out, the keeper had to spend a good deal of time every evening in collecting and driving them in.

Now, before the old wild goose had been able to go about many days with the others it was noticed that he was acquiring a kind of mastery over them, and that every day as evening approached he began to try to lead, and falling in that, to drive, them to the inclosures and buildings. The keeper curious to see how far this would go began to relax his efforts, and as his efforts slackened the gander's zeal increased, until he was left to do the whole work himself; all the keeper had to do was to go round himself and shut the doors. That state of things has now continued for some years, and the old wild goose was the acknowledged leader and master of all the birds on the farm.—Youth's Companion.

When "Old Women" Abounded.

Hugh Stokes, an English writer, has made a study of social manners in the days of Fox, Sheridan, Horace Walpole, Gibbon and Dr. Samuel Johnson, in which he portrays "The Glorious Georgiana," duchess of Devonshire, whom he makes a most entertaining character in touch with the top of English and French aristocracy. He tells us in the Devonshire Home Circle that in the eighteenth century women soon grew old; that at the age of twenty-nine Marie Antoinette, the wife of Louis XVI, gravely discussed the question with her modiste, Rose Bertin. She would soon be thirty. No one would dare acquaint her of her increasing years. Her idea was to change her manner of dress, which inclined too much to that of extreme youth. In consequence she should wear no more flowers or feathers. The Glorious Georgiana complained to the French ambassador that she was already seven and twenty years old. "Consider," said the glorious one, "what an age that is!" To which the gallant ambassador replied that "in France at seven and twenty a woman was considered elderly."

Debt a Matter of Habit.

"Getting out of debt is a matter of caring enough—in most cases," says a writer in the Home Companion. "I put in the qualifying clause advisedly. I know that there are families where ill health, and dependent relatives and business reverses have piled one upon another, where debt is simply unavoidable. But in most cases, I repeat, debt is habit, just as saving money is habit. I know twenty families whose experience has been the same as Jim's and mine, so far as the debt part is concerned. Most of them have even larger incomes than we; most of them are still in debt, and always will be. Simply because they have formed the habit of living today on tomorrow's pay check. Simply because they don't care enough to get out."

Ships From Many Lands.

The volume of shipping at the port of Philadelphia is the greatest in the history of the city. One day recently there were 63 vessels in port—54 steamships and nine sailing ships—having a total carrying capacity of 375,000 tons. The vessels were owned in the United States, England, France, Spain, Denmark, Sweden, Norway, Italy, Belgium, Panama, Holland, Japan, Cuba, Argentina and Haiti. They brought here huge quantities of raw materials to be manufactured in the factories and mills of the country and when they sailed away they carried with them manufactured goods to almost every corner of the world.

Promise of Success.

"Our Tommy," said the boy's mother, "ought to make a success in life. He shows great determination to stick to anything he undertakes."

"Does he?" queried the proud father.

"Yes," she replied. "Why, he put in the whole day making soap bubbles and trying to tie strings to them."

What the Fish Miss.

Robinson—"Do you think fishes can hear?" Dobson—"I should hope not. Listen to old Smith—he's smashed his rod!"

Benzol From Coal.

The amount of benzol recovered from one ton of coal amounts to two and one-half gallons. In 1915, 14,000,000 gallons of benzol were made in the United States. It is estimated that the output in 1916 has been no less than 22,000,000 gallons.

Recharge Your Batteries.

If you don't feel enthusiastic get up and rub up against some fellow who does. Recharge your batteries, and do the hard thing first; it will stimulate your nerve.—Ted Scarborough

SETTLERS FREE FROM TAXATION IN CLOVER-LAND

Michigan Legislature Enacts New Law to Help Man Building New Home.

"No taxes for five years" is the meat of a bill which is now in force in Clover-Land, the upper peninsula of Michigan, and passed to assist in giving the new settler a start. The result of the bill and the general information sent out by The Upper Peninsula Development Bureau, 100 Bacon Block, Marquette, Mich., showing that Clover-Land is the most productive portion of Michigan in all crops, has resulted in a great demand for lands.

Soil is Good. Agricultural experts investigating the soil of Clover-Land have found that it is rich and clean and capable of producing every crop grown in the Middle Western States. Much of the land is still idle and in order to attract settlers to these lands the state legislature has passed a law providing that no settler need pay taxes for five years provided he clears two acres of land each year.

The result has been a general activity in land movements and prominent land dealers of Clover-Land assert that the time is near when prices are going to jump. At this time there are thousands of acres at fine prices. Good crops last season while other communities were having losses has started agricultural experts and turned many eyes toward Clover-Land.

Is Well Located.

Clover-Land consists of the fifteen counties of upper Michigan. It has 1,000 miles of coast line on Lakes Superior, Michigan and Huron and its climate is very pleasing as the result of the effects of the great lakes. Railroads in great numbers, the best highways in the Middle West, numerous water shipping points, pleasing climate, fertile soils and a fine class of people have brought hundreds of settlers into Clover-Land during the last few years.—Advertisement.

AMERICAN SHOES IN MOSCOW

Even With Freight and Import Charges Added Prices Lower Than Russian Footwear.

American shoes which were put on sale in Moscow, late in the autumn, seem to have made a good impression, remarks Russia, a journal of Russian-American trade. The Journal of the All-Russian Company of Tanneries says of them: "Shoes imported from America have appeared on the market in Moscow. Some firms have already put them on sale, and speak very highly of them. The workmanship of the shoes seems on first impression to be rough, but the prices (in spite of the fact that the price of footwear has risen by 25 per cent in America), plus the import duty and cost of transportation, are lower by two or three rubles a pair (\$1 to \$1.50) than current Russian prices. One is forced to believe that the import of these shoes must increase in the near future, although, on the other hand, it must be regarded as a handicap that the American supplier makes it a condition that a third of the cost must be paid in cash at the time the order is taken, and the balance of the money on the arrival of the goods at Vladivostok."

Good for the Nerves.

To obviate the noise of pneumatic riveting machines, one has been invented that squeezes rivets into place with a pressure of a ton.

Details Wanted.

"What you git dem hens, Rastus?"
"Raised 'em."
"From whar—eggs or coops?"

Pulling up pigeonholes concealed in its top converts a new library table into a writing desk.

If you would have the respect of others begin by respecting yourself.



Have You Ever Suspected

that the cause of various annoying ills might lie in the daily cup of tea or coffee?

A sure and easy way out of coffee and tea troubles is to shift to

Instant Postum

There's no caffeine nor anything harmful in this delightful, pure food-drink—just the nourishing goodness of wheat.

Postum has put thousands of former tea and coffee drinkers on the Road to wellville.

"There's a Reason"