

The Quest and Culture of Orchids

The Garden of a Suburbanite

Vol. XIII.

APRIL, 1908

Some Old and New Annuals

The Stable and Kennel

No. 4

Extra

House & Garden



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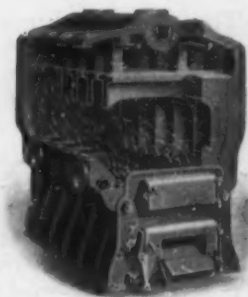
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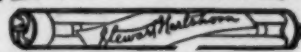
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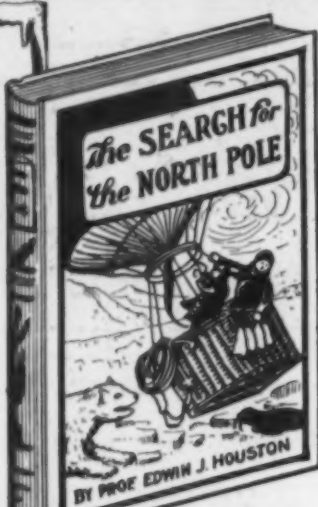
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sugar prune ripens earlier and is of immense commercial value.

Burbank is also the maker of the seedless plum, which he accomplished by crossing two varieties of the *Prunus triflora*.

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Mr. Burbank has made endless experiments with the potato. He keeps on his farm at Santa Rosa no less than 10,000 varieties for experimental purposes. He has grown potatoes of every shape and color, round, long, short, square, pure white, pink, crimson, purple and yellow. Burbank potato seedlings have been shipped all over the world. The late Cecil Rhodes planted 10,000 of his seedless plum trees in South Africa, and now they have multiplied into the millions.

"I worked seventeen years to produce a raspberry free from all thorns—without a pricker in it or a particle of rusty brown," he said.

Mr. Burbank has eliminated the fuzziness and acid from the quince—in fact there is hardly a fruit or vegetable that has not been experimented upon by Mr. Burbank, sometimes to their improvement, sometimes unsatisfactorily. In the floral world he has ennobled many flowers.

He has grown a crimson poppy, a Shasta or larger growth of the ox-eye daisy, and he has produced various new colors of roses, notably his latest, the blue rose. These results in plant life are obtained through selection and crossing. He implants the pollen of one upon the stigma of the other. He gathers his selections from all over the world, and when the cross produces a seed he plants it, and experiments until he secures the desired result.

A strawberry is crossed with a blackberry, or one of a species with another. Sometimes thousands of plants will grow when but one develops the ideal desired. From 300,000 apple tree seedlings but

(Continued on page 4.)



Horses

The woman's horse, the children's pony, the coach-horse, the trotter, the donkey, the farm-horse, etc., will all have their place in the excellent series of articles on "Which Horse?" soon to appear in HOUSE AND GARDEN. These articles will stir up many an inquiry on harness, wagons, sulkies, road-carts, farm-wagons, saddles, etc.

Frequent reference will be made to the various needs for barn, stable and manger. Building plans for up-to-date stables, barns and out-buildings will be features, along with handsomely finished photos of wide-awake animals, as well as pictures of children, women and the horse-lovers generally.



Dairy

Many a proud owner of blooded stock is a regular subscriber to HOUSE AND GARDEN. We're going to make him a closer friend—make him feel more brotherly, give him some vital points on blooded milkers; and get him to correspond with us; let him criticize, etc.

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We shall stimulate demand by conscientious and judicious advice along all dairy lines that will benefit subscribers and advertisers.



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Bees

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Dogs

Here is a department every one is interested in, whether the owner of a handsome collie, English bull, or a dog of "low degree." Photos of various breeds and cross-strains from the continent and in America will be features of this kennel department.

Well-informed fanciers will contribute practical articles on "How to know and purchase a good dog." They will explain their various natures and value, as watch-dogs, sheep-dogs, coach-dogs, etc.

Photos are on hand of certain types which will illustrate these talks. The advertisers who appear in HOUSE AND GARDEN are certain to get reasonable returns.



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—Birmingham News.

one was selected. From 65,000 bushes but one white blackberry was chosen.

Mr. Burbank's work has been widely recognized, commented upon and not infrequently criticized. The Carnegie Institute of Pittsburg awarded him \$10,000 a year for ten years for experimental purposes.

Mr. Burbank is a living example of his own theory of transmission of traits. His mother's family included the famous horticulturists Ross and Burpee. From his father he inherited a bent for mechanical inventions. As a boy he lived on a farm and took a great interest in grape growing. He was born in Lancaster, Mass., and educated in the grammar schools, immediately going into the Ames Plow-works, but his love of Nature led him to take up experimental work and he went to California in 1875 to secure a suitable climate.

He started a nursery business to maintain his experiments; acquiring sufficient property and achieving notable success, he gave his whole attention to his great passion. Nature has been his only school, for he is not a book scientist. He lives modestly and is himself a man of the simplest habits and desires. "My aim is to benefit mankind, and if I can improve our fruits it is my duty to fulfill my destiny," he has said.

He is a tireless worker, a man of quick perceptions and keen discrimination. He eschews publicity and seldom leaves his farm, shutting himself up and protecting his time from all intruders. He is fifty-eight years old and a bachelor.

He never uses tobacco or alcohol in any form, believing them both detrimental to intellectual work. The sum total of his theory of plant life is, to use his own words, "That there is no weed which will not sooner or later respond liberally to good cultivation and persistent selection."—L. J. Simpson in *Technical World*.

WATERPROOF WHITEWASH

A FORMULA for a whitewash which can be applied to lime walls, and which afterwards becomes waterproof, so as to bear washing, is given by a German paper. Resenchek, of Munich, mixes together the powder from three parts of silicious rock (quartz), three parts of broken marble and sandstone, also two parts of burned porcelain clay, with two parts of freshly slaked lime,

still warm. In this way, a wash is made which forms a silicate if often wetted, and becomes, after a time, almost like stone. The four constituents, mixed together, give the ground color, to which any pigment that can be used with lime is added. It is applied quite thickly to the wall or other surface, let dry one day, and the next day frequently covered with water which makes it waterproof. This wash can be cleansed with water without losing any of its color; on the contrary, each time it gets harder, so that it can even be brushed, while its porosity makes it look soft. The wash, or calcimine, can be used for ordinary purposes, as well as for the finest painting. A so-called fresco surface can be prepared with it in a dry way.—*Invention.*

STARTING EARLY PLANTS

TO have the best success with vegetable and garden plants which must be carried under glass it is better to grow your own supply at home, unless there is some garden in your locality which can be depended upon to furnish healthy plants at the right time and of the varieties you want. Too often plants offered for sale are of weak, slender growth which make a poor start set in open ground. It takes time for them to become strong and they often produce poor fruit owing to their being of bad varieties.

The chief failure with most growers and with some experienced gardeners is, they coddle their young seedlings too much, causing quick, tall, but weak growth, by keeping the plants too warm and not giving them enough fresh air. Another cause of weak growth is allowing the plants to grow too closely together in the seed boxes before transplanting to beds. These slender plants are costly at any price and it is much better to have those grown in much more open beds.

Cabbage, cauliflower, brussels sprouts, kohlrabi and lettuce require but little heat to start them into growth and as soon as the young plants are well started, should be given ample ventilation, except when there is danger of freezing.

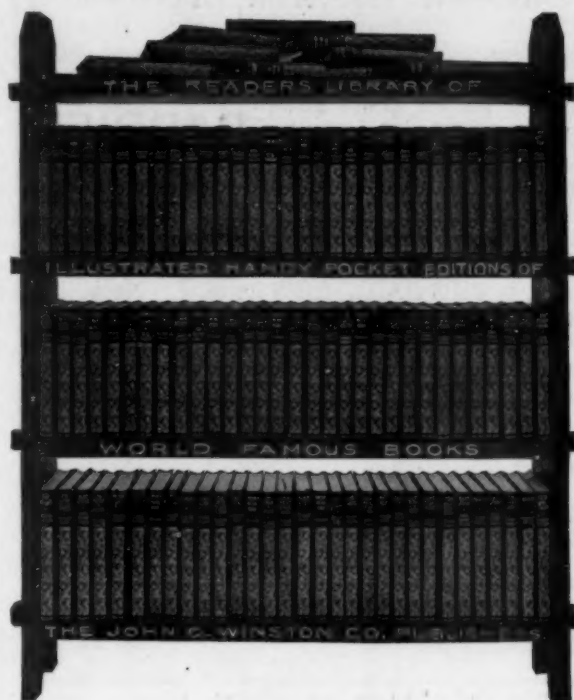
As plants increase in size thin out or transplant so that they are quite open, and remove the sashes except during the most severe nights.

These plants go into open ground

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HARPER & BROTHERS, Publishers

much earlier than tomatoes and other warmth-loving plants. Seeds can be planted two weeks earlier in the spring, as the growth is slower during the early weeks. If the young cabbage and other hardy plants are transplanted from a warm bed to a cold frame as soon as they are large enough to be handled, the warm, glass-covered bed can be used for starting tomatoes, peppers, egg plants, etc.

Tomatoes should be started six to eight weeks before the weather is warm enough to set them in the garden. Some may be sown in shallow boxes and started in a warm room and later transplanted in the garden. As well as plenty of air, the plants need a good root bed of loose soil, well enriched with stable manure. Nearly all of the seed houses publish leaflets or books giving good advice on the starting of plants. These can be had for nothing and should be studied carefully.—*Farm and Home.*

NEW YORK BOTANICAL GARDEN NOTES

FROM a recent number of the Journal of the New York Botanical Garden we take the following items:

Professor Murrill illustrates and describes a serious fungus disease of the chestnut the ravages of which have done considerable damage to these trees in the Zoological Park and elsewhere, threatening the extinction of this valuable tree in and about New York City.

The spraying of young trees with copper sulfate solution, or strong Bordeaux mixture, in the spring before the buds open might be of advantage in killing the spores that have found lodgment among the branches during the winter, but the real efficacy of this treatment is so doubtful that it could not be recommended for large trees, where the practical difficulties and expense of applying it are much increased. Nursery trees should be pruned of all affected branches as soon as they are discovered, and the wounds carefully dressed with tar or paint or other suitable substance. Vigilance and care should largely control the disease among young trees. With older trees all dead and infected wood should be cut out and burned and all wounds covered without delay. Particular attention should be paid to water, soil

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and other conditions of culture affecting the vitality of the tree; since anything that impairs its health renders it less able to resist fungus attack.

It is possible that the conspicuous ravages of the disease about New York City are largely due to the severe and prolonged winter of 1903-04, during which many trees of various kinds were killed or injured. The chestnut is peculiar, moreover, in its power to sprout from the stump almost indefinitely, and most of the trees now existing in this region are descendants of trees cut for lumber many decades ago. This repeated coppicing cannot fail at length to impair the vigor of each new generation of sprouts and render them peculiarly liable to speedy infection and vigorous attack. — *The Florists' Exchange*.

APOLLODORUS THE ARCHITECT

IT is supposed that Apollodorus was born at Damascus. He obtained the favor of the Emperor Trajan, and was engaged on the architectural and engineering works constructed during his reign. Among them were the square in Rome, with the column in Rome, a triumphal arch, a college, a theatre for musical performances, the Ulpian basilica, a library, baths, temples, roads, aqueducts, the great bridge over the Danube.

His Forum of Trajan excited the envy of Hadrian, and in consequence the architect was driven into exile on some frivolous pretext. The Emperor, in order to convince Apollodorus that he could easily dispense with his services, sent him a design for the Temple of Venus and Rome, and his opinion on it was asked. It had been prepared by Hadrian. Apollodorus answered that the emperor should have made it more lofty, and have introduced accommodation below the ground for the reception, whenever occasion required, of the machinery of the adjoining amphitheatre, and have imparted to the façade of the temple towards the Via Sacra a more imposing aspect. The statues, which were represented as seated, were said to be so disproportionate, that if the goddesses desired to stand up and walk they would not be able. As might be imagined, the artist paid for the freedom of his criticism with his life. — *The Architect*.

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APRIL, 1908.

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STARTING A PANSY BED

WHO does not love pansies with their bright little velvety faces upturned to yours? Everyone ought to have a bed of these old-time favorites, and a bed once started will give pleasure for many a year. If you wish to start such a bed this year, it is well to start the seeds in the house in order to have the blossoms come in good season. If started in March, they should be ready to bloom by the first of July.

It is important to start with good seed. While you can get a package for three or five cents, you will be well repaid if you pay a higher price, by the greater size and variety of the flowers. Plant seeds in a shallow wooden box filled with rich garden loam. Cover thinly with a sprinkling of dirt and press down firmly with the hands. Put in a warm, sunny window and keep well watered, and soon the little plants will begin to appear. When the second leaves come, transplant if they are crowded at all.

As soon as the frost is out of the ground, prepare a permanent bed for them. It should be in a partially shaded location, for they do not thrive well when they have the hot sunshine all day. It should be well spaded up and a good quantity of well rotted manure added. You can hardly get it too rich. The little plants are quite hardy and they can be set in the open ground earlier than most seedlings. In transplanting for the last time, be sure to give each plant plenty of room, for they spread out enough to occupy quite a space, and as it seeds itself, new plants will start up between these another year. Plenty of water and plenty of fertilizer are two requisites. If nitrate of soda is added to water, in the proportion of one ounce to a gallon of water, and given them once a week, the stems will grow longer, and be an advantage when arranging flowers for the house. The flowers should be picked freely, for the more they are picked, the more they will bloom.

Before the first snow comes, in the late fall, give the bed some protection. I like best a few spruce boughs piled lightly over it. When these are removed in the spring, you will find the plants all ready to send forth their buds with the warm, sunny days, while the new plants starting up from self-sown seed will furnish bloom for the late summer and fall. —Farm and Home.



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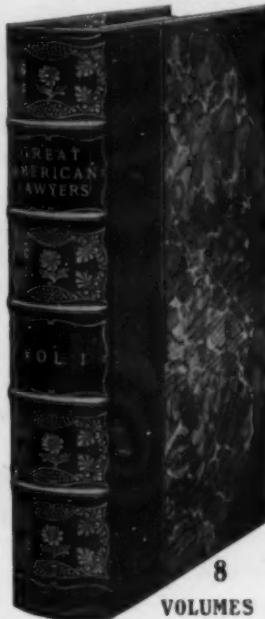
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MOTION OF THE NEVADA LODGE

A YEAR ago the Virginia and Gold Hill Water Company's employes repaired a disjointed pipe in front of Dr. Cole's drug store and put in a "sleeve" to permit of its expansion. Three days ago they were called upon to lengthen their "sleeve," and readily calculated that the "sleeve" had moved ten inches in one year. In some parts of the town the ground jams or compresses, and in other parts it expands and stretches. To accommodate this action of the lode the water company puts in "sleeves" in its fire and water-mains. The pipe columns that lead water to the electric motors on the 1,600 level of the Chollar mine are also provided with "sleeves." During the process of putting in those pipes the heat expands them to a considerable extent, and when the cold water is turned into them their shrinkage can be observed with the naked eye. It makes a difference of about eight inches in 1,700 feet, leaving so much space between the foot of the pipe and its base. If it were not accommodated with a "sleeve" the action of the water in the pipe would tear everything to pieces. The Water Company's tanks on the side of Mount Davidson are all situated in the "country" formation—off of the lode. They don't move. Pipes lead from the tanks to the moving lode. The point of separation is as distinctly marked as the Chinese wall. The pipe comes to the bank separating the two formations, and at that point a double elbow is put in the pipe, and as the lode lowers away from the immovable country rock, the lower point of the double elbow accommodates itself to the movement.—*Virginia City Enterprise.*

THE CHIMES OF ST. GERMAIN L'AUXERROIS, PARIS

DWELLERS near the Louvre in Paris are treated twice a day to some old-fashioned music by the chimes of the Church of St. Germain l'Auxerrois. Formerly the bells played tunes four times daily, but as their mechanism went wrong they became silent for years. These chimes have been restored in the tower between the church and the town-hall of the district, where they were before, and they have been formally handed over to the city. The airs, which have been arranged by a

(Continued on page 12.)



HOUSES WITH A HISTORY

"LONGLEAT," one of the few and purest examples of English Renaissance architecture, has been aptly termed by Old John Aubrey, "the most august house in England." While it has not played so prominent a part in the annals of English history as many other houses, which can be classified under the above general caption, yet its magnificent surroundings, its store of rare treasures and art objects, entitle it to the first rank for the student of architecture or of art. P. H. Ditchfield, M. A., F. S. A., furnishes a graphic history of this most stately mansion, from the time when its construction was commenced early in the last half of the sixteenth century, down to recent times.

He adds also much interesting material relative to its furnishings, its great tapestries, its old and valuable paintings, its rich library of priceless volumes and the matchless decoration of the dining-room with Cordova leather. This will be found a most instructive and interesting paper.

THE SMALL HOUSE WHICH IS GOOD

In the May issue will be shown the most picturesque and attractive home of Architect W. S. Hebbard, located in the "South Westernmost" city of the United States, namely, San Diego, Calif. Its situation on a bluff overlooking the bay gives it a commanding sweep as to views. Its stucco exterior, slightly pitched roof, wide extending eaves and well placed openings, with an artistic grouping of effects, makes in combination, a house which will be much admired and wholly suited for the mild climate of the Southwest. The color scheme as described indicates a most harmonious, restful and pleasing combination.

A MODIFIED ENGLISH COTTAGE

Elise Gallaudet in writing of a charming house at Los Angeles, California, has some clever suggestions concerning the relation of the house to the garden and vice-versa. The consistent fitness of things she considers of first importance, and that the values may be enhanced each by the other if their proper relations are considered when being planned. The harmonious massing of features produces such marked effects in contrast with the commonplace, haphazard method of house and garden planning that the truths she states may well be considered by every prospective builder.

THE HOUSE AND ITS FURNISHINGS

Mary Hodges in her article entitled "The House and Its Furnishings" offers many practical and helpful suggestions, both as to the selection of furniture and its proper setting and arrangement. Several interiors are illustrated in some of which the furnishings, though costly, have little connection with the spirit of their architectural setting, and the writer describes what would have been proper to produce more satisfactory results. This article will appeal particularly to the woman who is furnishing or doing over her home.

DECORATING AND FURNISHING THE NURSERY

"Decorating and Furnishing the Nursery" is the title of an article prepared by Sarah Elizabeth Ruggles. This is replete with information to the woman who is interested in beautifying and making sanitary and attractive this most important room of the home; for the happiness and serenity of the child induced by surroundings free from discordant impressions, directly affect the disposition for all time. Simplicity and refinement, based on true artistic principles, are the essentials. Illustrations of new designs in nursery papers, as well as reproductions of furniture designed wholly for the little people are given.

HOUSING THE AUTOMOBILE

With the article "Housing the Automobile" **HOUSE AND GARDEN** is taking up another feature of interest to the suburban and country householder. The suggestions made in this article are eminently practical, the garages illustrated being the most inexpensive of their kind.

SUGGESTIONS FOR THE MONTH

No more perfect demonstration of the truth of the adage, "A stitch in time saves nine" can be observed than is set forth in the direction and care of a house and its garden. To anticipate the proper time for getting the best results is the province of the above named department. The timely topics, for both the dwelling and the grounds surrounding it, considered in the May issue are full of meat and information.

CORRESPONDENCE COLUMNS

If you desire information about the furnishing or finishing of your house, or about the laying-out or planting of your garden, you can have expert advice and assistance, without cost, by writing to **HOUSE AND GARDEN**.



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conservatoire professor, are Lulli's "Marche de Turenne," Rameau's "Tambourin," and an old French ballad. These are heard at eleven every morning, and in afternoons at four o'clock. The carillon consists of thirty-eight bells with fifty-two hammers and comprising three octaves. The tunes are evolved by a clock-work mechanism, and the old wooden cylinder has been replaced by one of brass. Arrangements have likewise been made for special holiday airs, such as the "Marseillaise" on July 14, and Christmas chimes on December 25.—*Boston Transcript*.

WHY SOME STATUES ARE ERECTED

M. JULES CLARETIE, in the *Paris Temps* tells an amusing tale illustrative of the way in which decorations are sometimes obtained in France. M. Pegomas, or some other local busybody, yearning for a cross, a riband, or even the academic palms, calls on a rising sculptor and asks, "Could you do us a statue of Michelet for £300?" The sculptor replies, "If it is for a public square I think I could manage it for £250." M. Pegomas then posts off to the Ministry of Fine-Arts and relates how his fellow-citizens are anxious to adorn their town with the effigy of an illustrious man at a cost of £500 if the Government will only pay for the marble. The minister promises £250, and the trick is done. Should any subscriptions come in they go in advertisements, expenses, refreshments, and gratuities. When the statue is ready a member of the Cabinet, desirous of letting off a speech, comes down to unveil it, bringing, of course, a decoration for M. Pegomas. The sculptor is generally out of pocket, but he gets a good advertisement.—*London Chronicle*.

THE TALLEST TREE IN THE WORLD

THE tallest tree in the world, so far as has been ascertained, is an Australian gum tree of the species *Eucalyptus regnans*, which stands in the Cape Otway range. It is no less than 415 feet high. Gum trees grow very fast. There is one in Florida which shot up 40 feet in four years, and another in Guatemala which grew 120 feet in twelve years. This corresponds to a rise of ten feet in a year, or nearly one foot per month.—*Exchange*.



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A RUSTIC PERGOLA OF SATISFYING COMPOSITION AT NAHANT, MASSACHUSETTS

House and Garden

VOL. XIII

APRIL, 1908

No. 4

Practical Pergolas

By MARY H. NORTHEND

IN planning the modern suburban or country residence, every architect and every house-owner takes into account the porch, the veranda, and the garden. In any one of these, or in them all, the pergola may enter into the scheme, for its possibilities are boundless, and it will lend itself charmingly to almost any scheme of decoration.

In its simplest form the pergola is a booth, an arbor or a mere trellis for the support of vines. The happy inspiration came to us from Italy, where it originated among the vineyards of the peasantry, and spread from them to the owners of lands and mansions, who were quick to perceive its beauty, and who changed the simple framework, upon which grapes might ripen, into an artistic creation of stucco or marble.

The name, itself, is Italian, derived from the older Latin word, *pergula*. It means simply an open arbor. Its most common form consists of a double row of columns, perhaps ten feet apart each way, supporting at the top a coarse lattice-work of square beams, over which vines are trained. In Italy, these climbers are usually grape-vines, and the arbor furnishes a shady retreat in summer and a sunny walk in winter, after the leaves have fallen.

The Italian scheme of construction is to have the pillars substantial and the color light, in order that it may contrast well with the dark foliage of the vines. The walk is paved with bricks or with Italian tiles, and flanked at each side by

stately lilies or formal shrubs, while roses clamber up the posts, among the grape-vines. As to location, the pergola position, *par excellence*, is at the end of some walk which terminates in a cliff, from which may be obtained a fine and unexpected view of sea, or mountains, or river valley stretching away between the hills. The pleasing surprise which awaits the stroller enhances the charm.

In our modern days, the pergola has been adapted to all climates sufficiently warm that a part of the year may be passed in the open. We may follow the Italian ideals, if we will. They are sure to be artistic. We may also follow the Persian models, or the Indian; or we may modify them all, and evolve, from the resulting chaos, a plain and unpretending American pergola which shall harmonize with its surroundings. It will yield shelter

from the passing breeze and a screen from the too fervid sun; it will furnish for your eyes a continual feast of tender green things growing, and of tendrils climbing ever upward toward the blue. Whether it may be a stately structure, along classic lines, or a rude trellis-work upon which vines may run riot, if those vines are well selected, and so trained as to fulfil their purpose, your pergola is sure to be "a thing of beauty" and "a joy forever."

The types and forms of the pergola are almost endless, and the materials used in construction differ almost as widely as the specimens



FIG. 1—A PERGOLA OF ITALIAN FEELING

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House and Garden

themselves. Occasionally one is built partly or entirely of concrete, and often a pergola is seen, in whose case one row of columns is omitted, the missing support being supplied by the garden wall, or by the end of house or out-building. This single sided pergola is particularly satisfactory in grounds where space is limited. It may then be placed at one end or at one side of the garden, where its covering of vines will render it an attractive summer-house. It will need no furniture except a seat made of material that harmonizes with that used in constructing the pergola; and even when the vines are bare and the garden buried in snow, it will furnish a pleasant retreat at midday, when the sun is bright.

The primary design of the pergola was to furnish a support for growing vines. It certainly appears to the best advantage when it is put to some such purpose. Yet the pergola shown in Figure 2 was

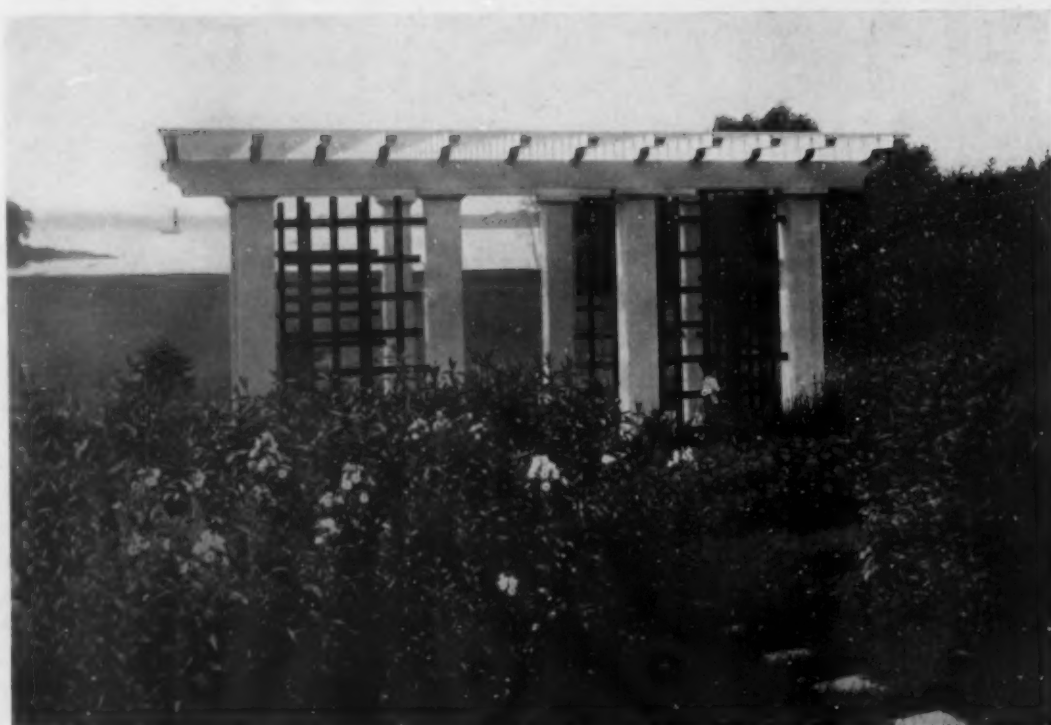


FIG. 2—MR. A. SHUMAN'S PERGOLA, BEVERLY COVE, MASS.

obviously planned to serve the purpose of ornamentation only. It is an American adaptation of an Italian ideal. We cannot deny that it perfectly fulfills its mission as it terminates the garden walk, and caps the bold bluff at the edge of the beach, with its unobstructed outlook seaward.

In Figure 1 is shown an admirable specimen copied after Italian models, with rounded Doric columns of concrete, brick walk, privet hedges, and a delicate tracery of vines of the *Clematis Jackmani*, which merely drapes the classic outlines, with a decorative effect, but which is not sufficiently heavy to veil any one of its attractions from our admiring gaze.

What a transformation is caused, in Figure 7, by the American adaptation of the Italian theme! Here we have the graveled walk, and the simple slatted settee. Great cedar posts furnish both uprights and transverse beams, firmly braced, to



FIG. 3—AN INTERESTING PORCH PERGOLA

Practical Pergolas



FIG. 5—PERGOLA ON THE GROUNDS OF MR. T. JEFFERSON COOLIDGE, MANCHESTER, MASS.



FIG. 6—A RUSTIC PERGOLA. ANOTHER PART OF THE ONE SHOWN IN THE FRONTISPIECE

increase their strength, that they may uphold a wealth of trumpet-vine, moon-vine, and wistaria. There is no fear of too many vines here, for they will but increase the charm. It is quite practical to construct, at slight expense, pergolas similar to this one, by the use of cedar posts with the bark left on. The upright posts are stripped of their bark for about four feet on the larger end, which is to be set in the ground. This end is then covered with a preservative mixture of creosote and charcoal, and the posts are set. The rafters and crosspieces are made of similar posts, and the result is an artistic pergola which is charming from its very simplicity, when covered with grapevines and flowering climbers.

The position and arrangement of the pergola shown in Figure 3 is both original and charming. The pergola is elevated, so that its floor must be reached by steps, and this arrangement places it practically on a level with the porch and doorway, and converts it into an out-of-door living-room. It is flanked by artistic stone walls, and the whole design is exceptionally artistic. As in Figure 1, the climbing vines are sufficiently heavy to be effective, while not so luxuriant as to conceal any of the fine architectural lines.

These porch pergolas are very satisfactory with their grape-vine drapery and varied effect in columns. The interesting pergola pictured in the frontispiece extends around two sides of a formal garden. The floor here is of flagstones, between which the grass has grown. The frame is of square beams with rustic posts for uprights, as well as for transverse and longitudinal poles. Potted hydrangeas line the sides, and the draping of vines is very heavy. Figure 6 presents the pergola at the second side of the same garden. Here the flagged walk is only about three feet wide, with a stone curb at each side, flanked by flower beds and potted hydrangeas. The walk ends in a short flight of stone steps, and the corner where the statue stands. The framework of the pergola shows more plainly here, as the vines have not yet covered the north side.

The pergola pictured in Figure 5 stands at the rear of the house, not far from the entrance porch, and leads to a rustic, woodland road which ends at the beach. The walk beneath the trellis is covered with closely clipped turf, while the uprights are square beams, and the transverse poles are rustic posts. Wire netting serves instead of the usual longitudinal pieces. The posts are buried in rambler roses and other blossoming vines, while rows of hollyhocks adorn the outer sides.

These rustic forms are much admired to-day, since they show much of nature and little of art, which is just what we expect in a garden. And just here may be a proper place to make a few suggestions. No matter how rough and rustic the pergola may be, have a care as to its strength and durability. Massive strength is needed to uphold the weight of vines which you hope and expect, to cover the top. If possible, use uprights of rough stone, sink them in a bed of concrete, and let them not be less than eight feet apart across the walk. It is a common fault of pergolas to be too narrow, after the vines have grown, to allow necessary space. Let your wooden crosspieces be very stout, and let them project at least a foot in each direction, to break the deadly straight line. Old oak beams and rafters, taken from some old building which has been torn down, make excellent cross-pieces. Strength is the main point to be considered.

In a few years, when your vines are grown, you do not want to spoil them by stripping them from their supports, in order to institute needed repairs upon the woodwork. When strength has been secured, there is no limit to the modifications and adaptations to which a clever and artistic builder can apply the theory of the pergola, each suggested by the conditions existing in the particular garden which it is to grace. Where a pergola can terminate at a point commanding an expansive view the effect is doubled. So, too, when it rambles away without any seeming end into a shady woodland path which leads to some charming retreat where communion with nature may not be disturbed.



FIG. 7—A PERGOLA OF ARTISTIC RUSTICITY

Some Long Island Country Estates

By RICHARD SCHERMERHORN, JR.

PART II

THE Whitney estate is greater by considerable acres than that of the Mackay's. Its character is different to a great extent, in that the configuration of the country is much more variable, the stretches of open meadow and undulating landscape are much broader and more pronounced. Located on one of the highest portions of the estate, the residence, a most delightful, rambling, many gabled mansion, looks out over a broad expanse of meadow-land toward the ocean. For comfort and pure tranquillity a more satisfactory spot could hardly be realized. The front of the house is unbroken by drives or paths, the main entrance being at the rear, and clusters of the original trees have been preserved, in such manner, however, that vistas from the house itself are unbroken. Thus from a distance the house is almost indiscernible while even closer view gives it the appearance of practically nestling among the trees. On this estate Nature has been considerably let alone, and conditions are such that this is all to be desired. Owing to the great extent of the property many driveways have been built, the most

beautiful being the road to Roslyn which consists of one and one-quarter miles of winding, picturesque drive through the woodlands which enclose the northerly and westerly portions of the estate. On its way this drive traverses the estates of the Mortimers and Stows, each in turn gaining the benefits, and through which conditions it has been known as the "party road."

As the Whitneys have always been known for their devotion to horses, it is natural to expect to find this interest predominant here. A most extensive racing stable is on the property, which has sheltered in its time practically all of the Whitney notables of past days. This stable is over 800 feet long, and most substantially appointed. A mile race-track was built several years ago for exercise, although it has lately fallen from use, and there has been laid out a fine steeplechase course. The other buildings are the old residence, coachman's house and stables, farmhouse and buildings, pumping station, superintendent's house and other minor structures. There is also an excellent golf course on the estate and a gymnasium



THE DURYEA RESIDENCE AND GARDEN

House and Garden



THE PARTY ROAD—WHITNEY SECTION

which contains squash court, bowling alleys, pool room, etc. In all, the Whitney estate is a most beautiful home. It lacks distinctive ornamentation, but is even the more attractive thereby. Some portions of it are susceptible to more development, but still in their very wildness have a charm which it would seem even a pity to experiment with.

The Mackay and Whitney estates are both fitted with all conveniences that any possible requirements could suggest. Each has a private pumping plant, sewage disposal and extensive drainage system.

The Duryea estate is located just beyond the southern boundary of the Whitney property and includes about eighty-five acres. With the exception of the residence and its surroundings the property has been developed unpretentiously, but even the natural features alone would place it in the first rank. The residence is located upon the high portion, and although at a considerable lower elevation than the estates on the hills to the north, the views from this point are still broad and unobstructed. Almost the first work done on the estate was the cutting of a broad vista through the woods on the knoll where the house was to

be located. The original idea was not carried out, however, of establishing this vista exactly on the central axis of the house, as the house location was later changed and the vista now, while perpendicular to the main axis of the house, passes on the side, thus differing from the usual arrangement on other estates. This passageway through the thick native timber is twenty feet wide, carpeted with an exceedingly smooth turf and bordered with a well trimmed privet hedge. Directly back of this hedge on both sides is a formal and regular line of tall cedars. The resulting effect has certainly formed a remarkable picture, the straight formal side lines, the velvety grass carpet and the considerable distance that has been obtained, producing an unusual and attractive contrast against the thick bordering forest of old trees. The

house itself is formal in design, fashioned from those of the Louis XVI. period, and is built of brick with stucco of mixed lime and cement. The principal problem here was to blend the building with the landscape. By means of a latticed trellis bordering the formal garden which intercepts the long vista at a point about midway in its length, the leap



A DURYEA VISTA



SERVICE ROAD—WHITNEY ESTATE

Some Long Island Country Estates



RESIDENCE AND GROUNDS OF MR. HARRY PAYNE WHITNEY

from formal into natural was successfully softened. The trellis is overrun with vines, thus enclosing the garden completely. This formal garden also was designed to act in close relation to the house. A stone lined pool occupies the center and the paths are bordered with straight clipped barberry hedges. On the south side of the house are the tennis courts, sunken somewhat, beyond which is the thick forest grove. The other buildings on the estate consist of stables, farmhouse and several farm buildings, also a private water plant.

This brief description of these attractive estates can do them scant justice. As they grow older, the barrenness which even yet exists in spots will disappear and they will continue to grow nearer to Nature. The average visitor will consider them beautiful and may enthuse over their attractiveness,

but very few will probably ever appreciate the real transformations that have been wrought and the careful study that has been given to bring them to their present state and to provide for their future growth. Who would ever guess that the space between the Mackay residence and the terrace at the beginning of the formal approach had been once a deep ravine; that the original incline to the Whitney house had been almost like a mountain side; that the beautiful stretch of lawn on the northeast of the Whitney mansion was a most disagreeable swamp; that where the Stow mansion and gardens now stand was one of the densest forest sections of the neighborhood; that nobody realized the view toward the ocean on the Dur-

yea property before the vistas were cut through and the new house located? One may view a great bridge or a noble building and his first thought is of the labor it has taken and the money that has been expended. It is very often, however, that the full appreciation of the work of the landscape architect is lost because the visitor does not know what the original conditions have been, or realize what art has accomplished; and the better the art in many cases the more inconspicuous the actual result. Thus it might pay the visitor in adding to his interest, to look closer to these works. Then while he may openly admire such an individual creation as a formal garden with its pronounced beauty, perhaps he may enjoy a glimpse of some quiet woodland more if he strives to imagine or ascertain how it may have originally appeared before art and experience made possible its enhancement.



THE BEAUTIFUL PARTY ROAD



ONCE A SWAMP, NOW A MEADOW



Respite

When I shall have a garden of my own,
All wild and free and fair,
Where, for you, as in my heart,
There'll be a corner set apart,
My friend, will you come there?

Bring with you, then, into that tangled spot,
Your tender thoughts and brave,
All those gentle things of life
Which wearied of the blinding strife
A sanctuary crave.

And there with love and peace to hedge us in,
The world's unrest may wait;
While from the tired hours
We steal a moment mid the flowers,
Within my garden gate.

—*Claire Wallace Flynn*

The Quest and Culture of Orchids

By G. BERTRAND MITCHELL

PART II

THERE is, some eight miles out from New York City, located on the famous old Plank Road of New Jersey, an establishment whose chief output is the Orchidaceous plant. Here the amateur and the orchid enthusiast may acquire valuable knowledge of the care and cultivation of these tropical imports. Visitors are welcomed and extended every courtesy by the senior member of the firm, a man of forty years' experience, or by his sons, who possess that marked Teutonic trait for floral culture. Of the one hundred hothouses averaging twenty feet in width by one hundred and fifty feet in length, sixteen houses are devoted to the epiphytes alone. These include more than one hundred and fifty varieties and number about fifty thousand plants in stock.

The writer found here immense quantities of evergreens and conifers, box and bay trees, palms, ferns and flowering shrubs—but as he evinced a desire to visit the orchid department, the firm-member's face expressed his pride and pleasure, for this is a "hobby" as well as a specialty of this establishment.

A visit was first made to the houses devoted to the *Cattleya* family. This and the closely allied genus, *Lælia*, are perhaps the most popular, useful and showy of the orchids. Among the inexpensive and easily-grown plants of this family we saw the *Cattleya lobata*, the *C. Mendelli* and the *C. Trianae* a native of Colombia and a splendid winter flower, selling at \$3.00 a plant. A very beautiful pure white variety, the *Cattleya Trianae alba*, has been flowered in this nursery and is valued at \$50.00. The blossoms of the *Cattleya Mossiae*, a native of Venezuela, vary from pure white to rose-purple. The *Cattleya gigas*, of Colombia, a summer variety, is no doubt the finest of all *Cattleyas*, giving one of the largest blossoms, eight to nine inches in diameter, but is more difficult to grow and requires a long rest every year.

A charming group of the *Cattleya illuminosa*, a hybrid crossed from the *C. aurea*, caught our attention, and the beautiful flowers, swaying in the current of air caused by the opened door, filled the damp atmosphere with the delicate odor of the tea rose. The



CATTELEYA GIGAS

petals are bluish red, the sepals old rose, and the labellum a deep velvety magenta.

The various *Cattleyas* differ in habit, but all the flowers are borne on upright scapes with the exception of *C. citrina*, which is produced from the apex of the pseudobulb and is enclosed (in the bulb state) in a sheath. "Their culture is extremely simple and great numbers are well suited for the Intermediate house,"

our guide informed us. "As you see, they are placed in pots or pans well drained, and can be selected so that some of a group would be in bloom each month of the year.

"The back bulbs of all the *Cattleyas*, after blossoming, are of no further use for flowering again. They simply serve as reservoirs for the plants, as they store up nutriment during the growing or wet season for use in the dry season. The old pseudobulbs, or enlarged aerial stems, apparently of no use to the eye of the inexperienced in this culture, are still a part of the plant and continue to render assistance for years." In buying *Cattleyas*, let us say that the best fully developed bulb should be supported by at least three or four back ones to give strength and nourishment to the new growth. Of the *Dendrobium* family,



HOUSE OF CATTLEYA TRIANÆ, GENERAL VARIETY

grown chiefly in Asia, a useful and beautiful species, we found the *Dendrobium nobile*, a native of India, one of the oldest known plants, not expensive and having the advantage that its blooms are formed on the previous year's growth. The *Dendrobium Phalanopsis*, from North Australia, and well worthy of notice, had as many as twenty to twenty-four delicate pink blossoms on a single spike. This plant, the finest for cutting purposes, delights in an abundance of heat and moisture and is worth from \$2.00 to \$5.00. Our guide pointed to a pure white variety of the same plant, remarking—"It is very rare and is worth \$300."

An accompanying photograph shows a hanging box of the dainty Siamese *D. infundibulum* with its slender bulbs and mass of light pink blossoms.

The *Odontoglossums* (named from their resemblance to the tooth and tongue) and the *Oncidiums*, also interesting genera of orchids, were grown successfully under cool treatment and therefore cultivated at moderate cost. Some of these varieties, if grouped together, would furnish a supply of the most charming flowers the year round. The *Odontoglossum crispum*, already mentioned and the *Odontoglossum Pescatorei* from New Granada, which produces branched



CATTLEYA MOSSIÆ

The Quest and Culture of Orchids

spikes of white flowers in winter, are deservedly popular.

The *Cypripedium*, (or lady's slipper,) has no pseudobulbs, and some botanists claim that on that account, is difficult to import and establish, but when once successfully accomplished, it is easy to cultivate, though not as attractive as the species already noted. Yet in this New Jersey nursery there are fifty varieties of this family alone, many of them of course being hybrids, and some suited for a cool temperature. The most common and one of the oldest and most easily grown is the *Cyp-*

ripedium insigne, a native of Assam, which flowers in winter and retails as low as \$1.50. Perhaps the most interesting and distinct form is the *C. insigne*, var. *Sanderæ* whose flowers predominate in white and clear yellow. Indeed to the layman, this entire family presents an interesting formation of blossoms and a great diversity of color. The *Lælia* family, closely resembling the *Cattleya*, and very handsome too, was produced here to the number of twenty odd varieties. A group of the noble *Lælia purpurata* with its showy flowers is worthy of mention, the sepals and petals pure white, the labellum rich crimson to purple. These are natives of Brazil and flower in May and June.

But here we importuned our guide to show us the abode of the *Phalænopsis*, "queen of the orchids" and commonly known as the moth orchid. Suspended from the roof of the tropical house, these masses of blossoms, twenty or more to the spike, presented so spotless an array of dazzling whiteness that one could but feel that even "Solomon in all his glory was not arrayed like one of these." "The best thing that ever came out of the Philippines,"—remarked the junior partner—a twinkle in his eye.

The curious aerial roots of this plant hang three or four feet below the basket, and beautiful as are the



CATTLEYA TRIANÆ ALBA

flowers, more astonishing still are the leaves. Some are rich green, resembling the rubber plant, while others are of a duller tone mottled or streaked with silver. These blossoms are used extensively in bridal bouquets, as are also those of the *Dendrobium formosum*.

The visitor naturally wishes to see the plants as they are received in their dormant condition. Rough and ungainly in appearance, they resemble a small cactus. Many have been injured if not killed outright, and in the hands of an inexperienced gardener would dwindle and probably perish. Some of the plants we saw seemed to have stood the journey well and looked quite green and fresh, having scarcely lost a leaf. If unpacked and suddenly exposed to strong light and air, the leaves would turn yellow and drop off, thereby weakening the plants—so they are first placed in a darkened house and gradually accustomed to heat, light and moisture, and as soon as a new growth of roots appear they are potted or placed in baskets. From the time they are received and potted, it will take the plants eight months to two years to put forth their first blooms.

In the potting of orchids, care must be taken to avoid breaking the roots. A clean earthen pot is half filled with broken crocks and small lumps of



DENDROBIUM INFUNDIBULUM



CYPRIPEDIUM CALLOSUM VAR. SANDERÆ

charcoal, to form effective drainage. Over this is placed a layer of sphagnum moss and the plant, held in position by one hand, should be lightly packed in, especially in the center between the roots so that no hollow space is left. Over the sphagnum is placed a top dressing. Plants are greatly benefited, especially during the summer, by occasional damping; but full-grown orchids benefit by frequent watering.

"Coming as nearly all orchids do from hilly and mountainous countries, fresh air is vital to them and may be admitted in the greenhouse or

conservatory on all possible occasions." The sunny American climate is much better adapted than that of the dull English atmosphere, but the more severe cold means a need of better top ventilation. In our climate an orchid section can be constantly protected by means of ground glass or white lead shading for eight months of the year. Shades and blinds are as useful in keeping out cold at night as the hot sun in the day time, but it must be remembered that with but few exceptions, the orchid "requires and enjoys light and sunlight," but not the sun's direct rays.

"The raising from seed requires considerable patience as several years may elapse in some species after the tiny seeds have germinated, before their flowering stage. The Cypripediums and Calanthes, under good treatment, bloom in three to four years; the Dendrobiums requiring a longer time; while the Cattleyas and Lælias do not bloom in less than from seven to twelve years.

"Hybridization is one of our chief arts," continued our host. "It is absolutely useless to cross flowers belonging to different genera, such as, for instance, an Odontoglossum with a Cattleya, or a Dendrobium with an Oncidium. But genera having a close resemblance in form and structure, as the Cattleyas, Lælias, Sophronites and Epidendrums, fertilize readily. Oncidium and Odontoglossums cross freely, but few hybridists are successful in raising plants from the seeds. Cypripediums have been crossed



CATTELYA MOSSIÆ



THE BEAUTIFUL CATTELYA TRIANGÆ ALBA

and recrossed to such an extent that the family is almost too numerous to mention.

"What the insect does to aid propagation of the plants in their native state, we do by touching a sharply pointed pencil or instrument to the pollen and then inserting this pollen into the opened seed pod, where it is caught and retained."

The *Cypripedium Spicerianum*, a native of Assam and Borneo, which a few years ago was worth \$500.00, to-day sells at \$2.00. When the flowers of this extraordinary plant expand, they are only about one inch long, but in a few days they extend two feet or more and actually trail on the ground. The sepals and petals are a yellowish brown, the lip a reddish brown. Mr. Ames, of North Easton, Massachusetts, had in his conservatory a short time ago, as many as sixteen varieties of this species.

"Our tiniest blossom is this *Oncidium ornithorhynchum*, grown in Mexico—its blooms, as you see, are no larger than the finger-tip, its center a salmon tint, and its petals a delicate mauve. The most curious of all is this baby orchid, from Guatemala," a plant we found in the last of the houses. The flower itself resembled the outline of a crab;—yellow-green and spotted with brown, but its center was an exact

reproduction of a miniature Japanese doll. "And here is the *Vanda carulea* from North India, its blossoms an azure blue, the only color, botanists have said, which did not exist in the orchid family.

"The story of the *Coryanthes*, a superb orchid from Santa Comapan, Asia, is interesting. It grows at the tops of trees that lean over ravines or rivulets. Its labellum is shaped like a pitcher, which contains a nectar so delectable that it attracts vast colonies of ants. The natives, fearful of the wasp-like sting of these insects, cut down these trees and drag them to the water's edge, where they are pushed in and allowed to remain until the ants are drowned. But the plant once removed from its natural habitation, refuses to thrive—thus causing us to believe with all good Darwinians, that the ants are absolutely necessary to its existence."

In concluding, let us call attention to the plants that may be grown with cool orchids—such as ferns and small palms, begonias, hydrangeas, azaleas, camellias, and the foliage plant, asparagus.

But the orchids must have always the first consideration and should be given a position that will keep them above the other foliage, insuring in this way the best ventilation and freest circulation of air.



HOUSE OF DENDROBIUM PHALÆNOPSIS SCHRÖDERIANUM

The Garden of a Suburbanite

By C. B. WYNKOOP

ONE morning in the early spring, I was purchasing vegetables for that day's use, and was startled at the prices asked. Making comments about how rapidly vegetables were going upward in price, I was informed that they would be higher throughout the year on account of the backward season. Suburban market prices are from ten to twenty per cent higher than city prices. To live in a suburban town is considered a luxury, as it requires a well-filled pocketbook to keep up appearances. The obliging clerk, who waited upon me, volunteered the information that it would be cheaper to have a small vegetable garden, and grow one's own vegetables than to purchase them

them occupied in a healthy and interesting pastime. The more I thought of the practical and financial side of the garden question, the more the desire grew in me to have one. But the how and where of the question gave me considerable thought, as my husband was a crank upon neatness in regard to the manner in which the grounds surrounding the house should be kept. Every flower bed, shrub and tree was placed in such a position that it would add attractiveness to the place. The grass was kept cut and the grounds clean, with every thing in order. To approach him upon the garden question made me have a heart full of misgivings, but, my mind was made up, and on one evening when he appeared to be

in good humor, I broached the subject to him. He did not take kindly to my suggestion but informed me that a vegetable garden was not an adornment to any place. He could not see how he was going to find the time to attend to it and various other excuses were given. I graciously informed him that I would attend to all the work, and would take all the glory and success of the garden upon myself, causing him no trouble or worry. I had made



THE HOUSE GROUNDS

at the various market places. I came to the conclusion that he was right in this opinion, and I noticed that most of our neighbors had their own gardens back of their houses. The men seemed to enjoy working in the gardens as they never let a day pass without doing some work, either in the morning before going to business, or in the evening after their return. I gave considerable thought as to the ways and means of getting such a garden started. While glancing over the contents of one of the city evening papers a few days previous I read a very interesting article upon the reasons why suburbanites should have vegetable gardens. It urged upon its readers the necessity of at least giving the children a piece of ground, in which they could dig, plant seeds and raise vegetables as a part of their education and to keep

up my mind that I was going to have a garden, one that would be an ornament to the place if such could be had with careful work. Then, taking into consideration the amount of money that I would save, thereby making it a benefit to the family, I had planned my garden when the thought first came to me some time previous, and decided to plant those vegetables that were well liked and not too many of a kind, as this being my first venture I desired to be conservative and not too liberal in my anticipations as to the number of plants that I was going to raise, because failures do happen to beginners as well as to experts. The garden was measured off in a plot forty by fifty feet, sloping from west to east, in which position it had the sun the greater part of the day. The slope of the grounds kept it

House and Garden

well drained, with a stream of running water the full length of its eastern border which divided our plot from that of our neighbor. How to get my plot into condition for planting rather puzzled me. On one of my daily walks towards the outskirts of the town I came upon a farmer plowing, and the thought came to me, why not get him to do my plowing. It was not long afterwards that I had mustered up enough courage to ask the farmer to plow my vegetable plot. With a little persuasion I was able to secure him to do the work. One morning soon after he drove up to the house with a plow and soon had his team hitched to it. Before he started to plow I gave him strict orders to keep the surrounding ground clean as it was before he began work. The plot was marked off with wooden pegs and then plowed. About noontime it was finished. After dinner he returned with a harrow and one load of well rotted stable manure which he scattered over the plowed up soil and then harrowed it until the soil was very fine, and after he had finished and cleaned up, it was a very neat looking job. He charged me \$4.00 for the day's work. I was elated over the fact that the hardest part of my garden work was accomplished at such a small expense.

I was anxiously waiting for the return of my husband that evening. He went out and surveyed the work with his critical eye, but made no comments and I came to the conclusion that every thing was done in a satisfactory manner. As soon as possible, I secured the necessary packages of seeds of the several varieties that I desired to plant, at the total cost of fifty cents.

The following day, as soon as my housework was over, found me planting my seeds and, following the directions given upon each package, I soon had my sowing finished. The rows were made with the use of a garden line to keep them straight, and ran north and south, with eighteen inches between each row. Neatness was one of the main things desired, thus all rows had to be straight, so as to have an attractive looking garden when the plants were in full growth. March 15th, found the plowing, harrowing and the fertilized garden plot ready for the seeds. April 15th, I planted my onion seeds and in due time thinned the plants to two inches

apart. When planting the seeds I allowed each alternate row in the garden plot to remain empty to be used for transplanting when the plants were large enough to thin out. Peas were sown April 20th, and were ready June 20th. They were the early June variety. The peas were followed by celery July 15th, for winter use. Spinach was sown April 17th, and was ready July 4th, when we gathered our first mess. Cabbage was sown April 25th, allowing twelve inches between each plant after transplanting, and was ready for use August 1st. Potatoes were planted April 20th in hills one foot apart, and were ready for use about July 20th, and were followed by corn July 15th, for a late supply. Beets were planted May 1st, allowing three inches between



A VIEW OF THE GARDEN

the plants. Radishes were sown May 1st, allowing two inches between plants and were followed by lettuce June 20th, this being our second sowing of lettuce. Pole beans were sown May 6th, lettuce May 10th, allowing six inches between each head, and were followed with a second sowing of radishes July 1st, which was our last sowing of this variety of vegetable. One dozen tomato plants were set eighteen inches apart May 20th, and the first tomatoes were picked the last of August. Our early corn was sown May 10th, allowing four kernels to each hill, the hills were eighteen inches apart. I had great satisfaction in working in my garden, and I learned much.

Working in the open air improved my health and gave me the kind of exercise that most housewives are in need of. I derived great enjoyment in witnessing the attitude of my husband. Every morning before going to business, he would go to the garden and look it over from every point of view, but on his return

The Garden of a Suburbanite

would offer no criticism and seemed to be in a deep study, so I kept my own counsel. One evening while looking out of the kitchen window I had the pleasure of seeing his lordship talking to our neighbor, who was working in his garden and they seemed to be comparing gardens and were enjoying their talk. All the men evidently enjoyed the work or they would never have been seen in the various gardens, working after their tiresome day's work in the city during the hot summer time. It is not an easy undertaking to get a busy man to work before or after business hours unless he is interested in his garden. My plants were growing rapidly and had made more headway than those planted in the other gardens in our vicinity for which I gave credit to the proper preparation



ANOTHER VIEW OF THE GARDEN

and the admirable situation of the garden. My husband soon had the fever for working in the garden and early one morning found him with coat off, sleeves rolled up, working with a hoe as though his life depended upon his efforts, and a good garden crop. At night he was at it again and kept it up throughout the summer. The garden work served as a good tonic to his mind. It gave it a rest from office work, causing him to become more cheerful. His conversation was usually as to the merits of this crop or that crop, and this method or the other method of cultivation. The garden seemed to be his garden and not mine. I remained as silent as a clam for fear that the charm would wear off. I was thus enabled with little effort on my part to have the neatest and best growing and producing garden in our vicinity. We had the first of every vegetable planted, which was very gratifying to us. The praise of our friends made the work pleasant and easier to perform. As the various vegetables matured they were gathered and all that we did not need for our own use were given to our friends. They were more than pleased, as fresh vegetables have a flavor of their own that market bought ones do not possess, as they have been picked possibly a week before they reach one's table. Was my garden a profitable venture? Yes, in a number of ways; especially when we compare the output of the garden at the

prices charged at the suburban markets. Then again the outdoor work is a means of improving one's health which is the best paying investment, and to see one's earnest desire actually fulfilled is a most enjoyable factor in garden work. It is not how many beets from the beet rows or the number of cabbages from the cabbage rows, nor is it the large number of quarts of peas, ears of corn, bushels of potatoes or onions, bunches of celery and radishes, heads of lettuce and pecks of spinach gathered from their various rows, although it is pleasant to be instrumental in cutting down the yearly expense account, but the fact that with a little encouragement and inclination for the work, small obstacles can be removed and a great amount of good can be accomplished. Our garden

experience proved to be a profitable venture when the quality and quantity of the vegetables gathered therein were computed at the prices paid at the market and netted us a profit of \$84.00 over the expenses, which amounted to \$7.90, as follows: for hiring a man to plow, harrow and the one load of fertilizer \$4.00, fifty cents for seeds, \$2.50 for wire for the pea vines, forty cents for the



SOME OTHER SUBURBAN GARDENS

tomato plants and fifty cents for a peck of seed potatoes. The market clerk's advice should be followed by every suburbanite, who will thus be the gainer, not only in health and pocketbook, but in the indescribable satisfaction which surely comes to those who realize for the first time that they are not merely "consumers" but are themselves "producers."

Vines and Vine-covered Houses

By CHARLES ALMA BYERS

All in an oriel on the summer side,
Vine-clad, of Arthur's palace toward the stream,
They met.—Tennyson

ABOUT vine-clad houses, whether castles, palaces, or cottages, there is a certain romantic charm. It has always been so—since mythological times, at least,—and probably it always will be. Artists have ever pictured for us the crumbling ruins of ancient castles, covered with clinging vines, and when have not the poets and other writers loved to weave romances around a prince and a princess and a vine-clad palace?

Verily, vine-covered houses have always received from artists and authors a great deal of attention. And why? Is it not because the clinging vines give to the house an artistic and picturesque appearance? And was it not because of this that they have woven around such houses the charm of romance? For the probable emphasizing of the answer to these questions, the reader's attention is invited to the accompanying illustrations.

The writer will not undertake, however, to advocate the use of decorative vines for all houses and all locations. That would be to advocate the carrying of the attempt toward the creation of "romantic charm" too far. There are any number of styles of houses and any number of houses so located that will not permit, with good taste, the use of such decorations, especially in the matter of homes in the city. At the same time, however, there are, in our opinion, a large number of homes, in both the city and country, that can be greatly improved in appearance by the proper use of decorative vines.

It is, of course, impossible to set down a rule for vine decorations that can always be followed. The best that can be done is to offer a few suggestions. In the first place, vines can often be used to good advantage in covering up architectural blemishes. A plain, uninteresting side of a house can often be made attractive and picturesque in appearance by a

few well trained vines. Rough and inappropriate fences and barns and other out-buildings are also often improved in the same way. But vines are not only suitable for the covering of blemishes. They may be used with good taste for decorating parts of the exterior of many houses in which no architectural discrepancies appear. They are particularly suitable for decorating the driveway entrance and may invariably be well used to twine about outside chimneys, verandas and balconies. In fact, the purposes for which they are suitable are most numerous, and therefore the decorator must be left mainly to the exercise of his own judgment.

To name the styles of architecture to which decorative vines are suitable and unsuitable is also a matter difficult to be definite in. Vines have been used for decorations around frame, brick, rock and concrete buildings, and it is impossible to say that they appear more suitable to one style than to another. And even in the matter of the location of the house it is equally difficult to devise a rule to be followed. The most that can well be said on the subject is, that, being used mainly to create or to emphasize an effect of picturesqueness, decorative vines should be used,

where, in the opinion of the user, they will really enhance the general appearance of the house without marring the effect of that particular landscape, which is sometimes possible in the city.

There are many kinds of vines used for decorative purposes. The ivies, however, are probably the kind in most common use, and the Boston or Japanese ivy, technically known as *Ampelopsis tricuspidata*, is very much in favor at present. This is a vine very similar to the Virginia creeper (*Ampelopsis quinquefolia*), practically the only difference being that the former has a three-lobed leaf and the latter a leaf of five lobes. Both shed their leaves in the



BOSTON IVY COVERING A PALM

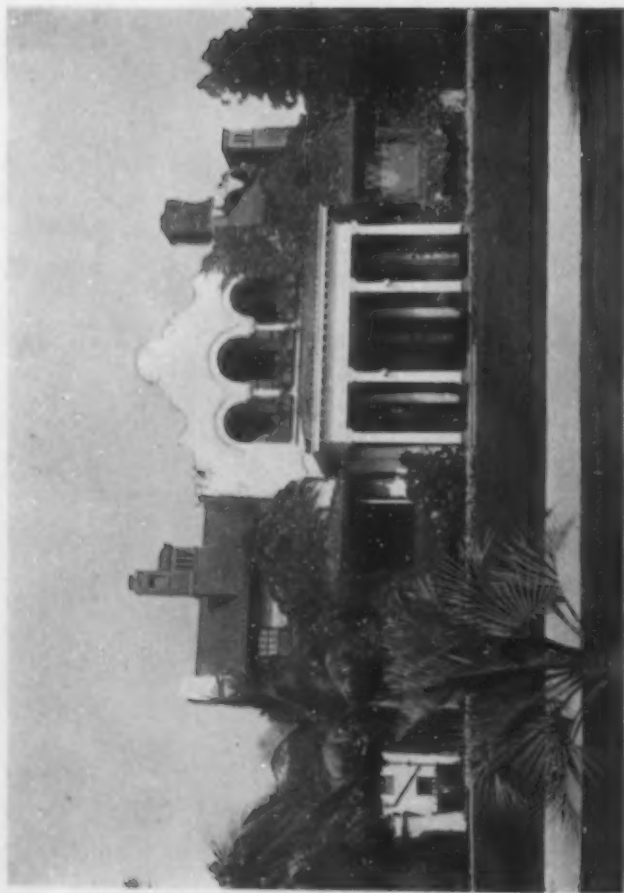
Vines and Vine-covered Houses



THE *FICUS REPENS* VINES



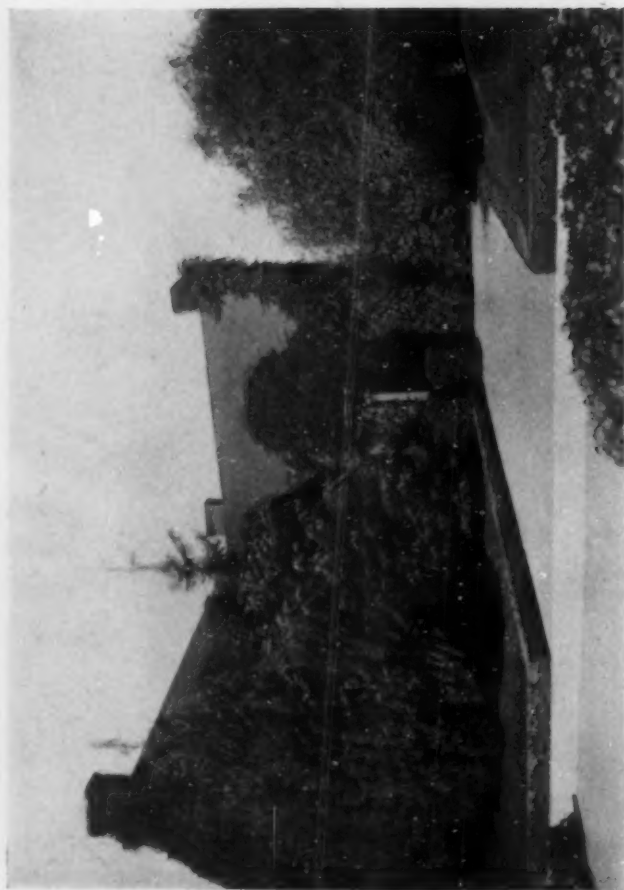
THE CLOSE-CLINGING VINE IS BOSTON IVY AND THE CLUMP IN THE CORNER *BOUGAINVILLEA GLABRA SANDERIANA*. THIS IS A VERY PRETTY COUNTRY HOME AND OFFERS SOME GOOD SUGGESTIONS



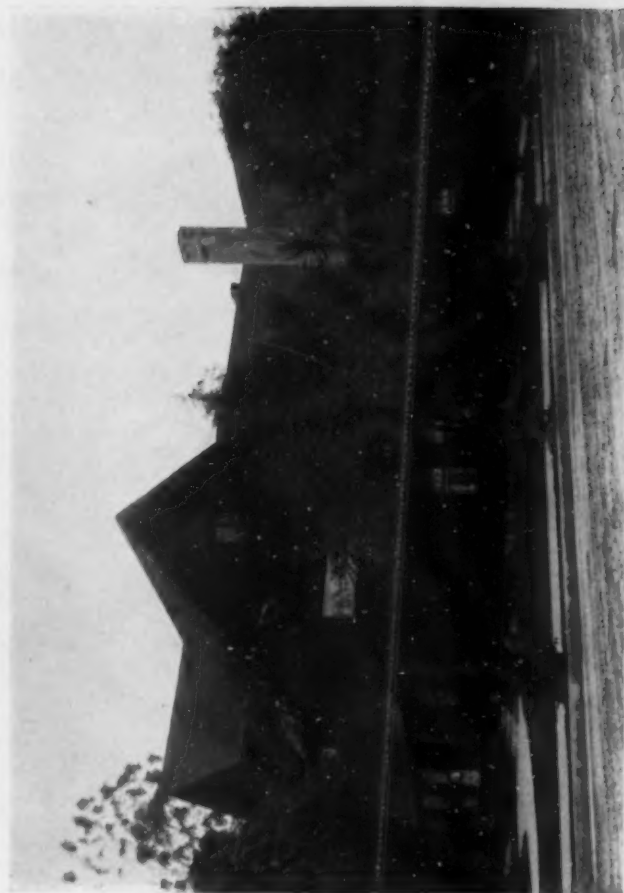
A MISSION STYLE HOME DECORATED WITH BOSTON IVY



A HOUSE WITH A PLAIN SIDE COVERED WITH BOSTON IVY



THE VINE COVERING LOW WALL AT ENTRANCE, FICUS REPENS, THE CLUMP ON THE ROOF, BOUGAINVILLEA LATERTIA, ON THE END CHIMNEY, BIGNONIA TWEEDIANA



FICUS REPENS, CREATING A VERY PRETTY GREEN EFFECT CLOSE-CLINGING AND ALMOST UNNOTICEABLE AT A SHORT DISTANCE

Vines and Vine-covered Houses

fall, and the leaves before falling, change in color, from a dark green to a bright bronze.

The common or English ivy (*Hedera Helix*) is also very popular as a decorative vine. It is an evergreen shrub of abundant foliage and is especially suitable for walls, fences, trellises and all other places where a climbing vine is desired. The other ivies well known in America are the Kenilworth (*Linaria Cymbalaria*), the German (*Senecio mikanioides*) and the ground (*Nepeta Glechoma*)—all of which are quite popular as basket plants.

Another vine that is very desirable for decorative purposes about a house is the *Ficus repens*—a sort of creeping barren fig. This is an evergreen vine, and is always graceful and durable. Its leaves are a very dark green, and are heart-shaped, with different sized lobes. By means of small tendrils it clings tenaciously to any kind of a wall, and because of its being so graceful and ever green it is fast becoming the most popular wall vine. Of the *Ficus* order there are about six hundred varieties, but the *Repens* variety is the most satisfactory for purely decorative purposes.

For close clinging vines, such as are desired principally for providing a simple green covering for walls, the ivies and the *Ficus repens* will always be found satisfactory, and they may be grown in almost any part of the United States. If a more elaborate or imposing vine, however, be desired the Bougainvilleas and the Bignonias should be found suitable. Of the former there are two varieties that are grown



DRIVEWAY ENTRANCE COVERED WITH BOSTON IVY



A GOOD SUGGESTION FOR THE USE OF VINES

quite successfully in the Southern States and in Southern California, *B. lateritia* and *B. glabra Sanderiana*, both introduced from South America. The first named has brick-red bracts and the latter magenta bracts.

Of Bignonias there are about one hundred species in existence in Argentina and elsewhere, but only two—*B. Tweediana* and *B. capreolata*—are used to any great extent in the United States for outdoor decorative purposes. The Bignonias and the Bougainvilleas, however, are not, strictly speaking, climbing wall vines, but they are used quite often in conjunction with the ivies and the *Ficus repens* to give the decorations a dash of color.

Vining plants should be set out as early in the spring as the weather will permit. This will enable the vines to get a good start the first summer. The ivies and the *Ficus repens* are not affected by the winters, unless unusually long and severe, but the Bougainvilleas are suitable only for warm climates, while the Bignonias are but little more hardy. To preserve the latter two through the winters in the Eastern and Northern States they will have to be transplanted to hothouses or used as house plants.

An opinion, more or less common, has prevailed for some time that close clinging vines produce damp, unhealthful walls and that they will also injure and sometimes kill trees, which in neither case is true. Instead, a close study of the subject has proven that all such vines as the ivies and the *Ficus repens*, through their clinging tendrils, draw moisture from the walls.

The Shasta Daisy

Chrysanthemum hybridum

By GEORGIA TORREY DRENNAN

AN unusually free-flowering perennial plant. The ray-flowers, pure white with yellow centers, average four inches across, and are profuse from April or May till late in autumn.

The Shasta daisy is one of the triumphs of Santa Rosa. Mr. Burbank regards it as one of his greatest achievements. As a boy he had a chivalrous admiration for our common wild daisy (whiteweed or ox-eye daisy), *Chrysanthemum leucanthemum vulgare*. Regarded as an adversary to the soil and an aggressive foe to crops and useful plants, by strenuous efforts the farmers exterminated it in one place but to see it reappear in a dozen surrounding parts; it never knew when it was whipped.

Mr. Burbank, early in life, decided the pretty blossoms and the iron-clad constitution of this cosmopolitan weed, to be admirable. He selected this native American species, in combination with the coarser, larger English wild daisy, and a tall growing

one that Japan produced to begin the hybridization which has resulted in the Shasta daisy. Years of effort were required till among thousands there appeared one daisy exceeding them all in size, beauty and general refinement, withal hardy enough to grow within the arctic circle or under the equator. This is not surprising when the true nature of the wild daisy is considered. The leaves in rosette form lie close and flat to the earth, crowding and shading out of existence hardy grasses and weeds, and are destructive to cultivated plants. A heavy seed bearer and growing upon creeping root stock it spreads inveterately.

Entire fields, and extensive acreages, in many parts have been taken possession of by the ox-eye daisy, the farmers preferring to clear new ground rather than contend with a plant that profits by the culture given the crops planted in the ground it infests. In Canada the fields of ox-eye or wild daisy are



A BED OF SHASTA DAISIES AT SANTA ROSA, CAL., GROWN BY MR. LUTHER BURBANK

The Shasta Daisy

generally remarked for their beauty. Acres of white and gold ripple in the sunshine with every passing breeze.

Our Chickamauga, Gettysburg and other battlefields have been white with daisies. They were brought in the Canada oats, for feeding cavalry horses, and in due time naturalized themselves for, apparently, the balance of time. Little wonder the dreaming boy, Luther Burbank, admired them and planned for them a better day. If the green daisy plant is cut in half, root and all, down under the snow in the dead of winter, the flower buds will be found.

They are ready to blossom as soon as the earliest verdure of spring puts forth. So much for one of the ancestors of the Shasta daisy; it is clearly seen where it gets its widely available qualities; the good without the evil it happily inherits. It bears every mark of the highest culture. Every wild, weedy feature has disappeared, and in the very extensive composite class, perhaps no finer flower exists.

The flower stem is slender, but firm, two feet in length, the foliage luxuriant and bright, and the broad white petaled, yellow centered flowers succeed each other so rapidly, that from the beginning till the close of its prolonged bloom-time, beds and borders seem, every passing day, at their beautiful zenith. The long stems are highly available for cut flowers, for which purpose the Shasta daisy is much used with roses.

The plants are easily propagated by root divisions and cuttings. Volunteer plants are rare. Seldom do the flowers self-sow their seeds; never are the seedlings overbearing and aggressive. In this dignified reserve it differs from all wild daisies; even the Swan River daisy (*Brachycome iberidifolia*), of Australia, and the starwort or aster, so-called, the Michaelmas daisy, are heavy seed bearers that self-sow and produce armies of volunteer plants.

Daisies rank with asters as valuable flowers for high altitudes. Heretofore there were no daisies that equaled the improved strains of asters. The single-flowered Shasta daisy is not the only one of this unusual strain. The double Shasta daisy is one of Mr. Burbank's most recent developments. That is, the flower has a double and sometimes a triple row of petals. In a strict botanical sense, this is not a double flower. Daisies, asters, chrysanthemums, sunflowers and all the composites owe their claims to

being double, to this manner of increasing the rows of the rays that form the corolla.

They are beautiful, at any rate. The double Shasta daisy has not quite the grace and simple elegance of the single-flowered, yet it is an acquisition. In the course of time, it may be full, fluffy, and pure white, as beautiful as the double chrysanthemum with the added advantage of continuous blooming. This is a relative term. In Southern California where the temperature varies only a very few degrees, continuous blooming means every month of the year; in Louisiana, where

the rotation of the seasons is marked, albeit the winters are mild and balmy, ten months, and in all Northern sections, late spring, all summer and early autumn. Throughout its long season of florescence, but one feature mars the bright faces of the daisies, and that is the brown disks when seed formation begins and ends. Every flower that begins to turn brown should be cut. This simple precaution adds very much to the bright silver and gold beauty of the Shasta daisies month after month.

One feature to be admired is that these wide-spreading, full-hearted flowers never depend, with their own weight. Many flowers so constructed, more or less turn their faces downward. Not so with daisies. Every flower holds its face up, spreading itself to full view; covering the plants, giving very fine expression to the garden.



NEW DOUBLE SHASTA DAISY

Garden Phlox

By W. C. EGAN

FEW there are, indeed, who do not know and admire the many forms of the garden and wood phlox. For over one hundred and eighty years this flower, as represented by some of its varieties, has been known, and admired, still it has seldom, if ever, received the poet's praise. Its very brightness suggested its generic name as phlox, a Greek word signifying flame.

Most flowers, as popular as this, receive many common names, some of which, in time, supplant the generic one, as instanced by the common bedding geranium which is not a geranium but a pelargonium, but the phlox has seldom been so honored. "Moss pink" for the creeping *Phlox subulata*, "Pride of Columbia," for a tall Northern California species and "Sweet William" for *Phlox ovata* and *Phlox pilosa* embraces them all.

Phlox Drummondii, a Texas annual, which was not known until 1835, is the parent of the many varieties of annual phlox now grown.

It is an admirable cut flower, easily grown, but if wanted for a continuous supply of cut flowers, several sowings should be made, one under glass in March, and two out-of-doors; the first as soon as the frost is out of the ground and the second not later than May. Plant or thin to a foot apart and mildew is less liable. Plenty of water during dry seasons prolongs the blooming period.

If planted in masses for effect, do not sow until towards the last of May. It is much better to go the early part of the season without bloom, but have a growing green mass of a promising future, and then, in midsummer, and late into the fall, enjoy their flowers, than to have early flowers and a ragged out-bloomed bed before the season ends.

When we come to the dwarf perennial forms, especially the moss pink, *Phlox subulata*, we reach one of the showiest and most cheerful of our spring blooming plants.

We have had the yellows and purples in the crocus,

and the blues in the chionodoxa, Mertensia, and the forget-me-nots, and are ready for a change. The unfolding blossom buds of the apple trees and a few of the formal hyacinths have suggested a pink, but it remains for the *Phlox subulata* to present this color in vivid masses. Out of a dense mossy green, rise innumerable short stems, each carrying a dainty, flat, spreading flower, of a delicate pink, emphasized by a darker eye in some varieties, and lighter in others. They literally hide the foliage. There are six or more colors to be obtained of the seedsman, including white, purplish rose, light lilac and rosea, a bright rose.

This phlox is easily grown, even in cold climates if planted where the drainage is perfect in winter. A sloping bank in full sunshine is an ideal situation. The winters often brown the foliage if not protected from the sun. The best way to protect it is to obtain short branches of evergreen boughs and insert the ends in the soil between the plants, placing them in a slanting position. Branches of the oak, cut early in the fall and stored until wanted are also good, as when so cut they retain their foliage all winter. In the absence of these use bushy perennial tops, such as the pompon chrysanthemums. Place these in position before frost. In the

spring, remove every other one letting the balance remain a week. This gradually accustoms them to the light.

When done blooming they present a pleasing mass of green and towards fall bloom again but much less freely. If you desire to increase your stock, or your bed has got some troublesome weed in it, hard to eradicate, take them up, clean them of weeds, and tear them up into small pieces, saving those that have some roots attached. Do this right after blooming.

Prepare your bed, having the soil light and rich. For mass effect plant in rows one foot apart. Make a V-shaped furrow, six or more inches wide at the top. In it set your plants quite deeply, just so that



NEW WHITE PHLOX, "W. C. EGAN"
Dark green, persistent foliage, early bloomer

Garden Phlox

about three inches of the top is above the soil. This will cause some of the green stems to be under ground, which is all right, as the plant will throw out roots all along the stem. Plant about two inches apart in the row, keep them in place until the row is finished by throwing in a little soil. Now stand up, fill in with soil, and with the foot tamp it as hard as you can. Water it well, and then shade it in some manner for a few days. Coarse hay thrown lightly over it will do. There are quite a number of species of spring and summer blooming phlox worthy of cultivation, among them being *Pblox amana*, a pink purple; *P. Carolina*, of same color; *P. divaricata*, with sweet-scented, lavender-blue flowers; and a white variety, *P. pilosa*, the hairy phlox, with pinkish purple blooms; *P. reptans*, a creeping form, flowers a rose-purple; *P. Stellaria*, growing eight to ten inches and bearing pure white flowers in summer; *P. ovata*; our native *P. divaricata*, and others. A garden might be constructed of them alone that would bloom from spring to frost.

The term "hardy phlox," is generally applied to the different forms of the tall growing and late blooming varieties.

All of these are mainly garden hybrids of *Pblox paniculata* and *P. maculata*, and are so intermingled and hybridized that their parents would not know them. The unpleasant purple and magenta tones of color formerly so predominating, have been eliminated. There are hundreds of named varieties, and being easily raised from seed, some nurserymen send out their own raisings under names they have given them, and if one desires to duplicate any he may see on a friend's grounds, it is well to obtain the nurseryman's name who furnished it and order from him. There are, however, many good varieties imported from European growers who have named them there, and these, being distributed among different seedsmen here, may be obtained true to name from different houses. This class of phlox may be divided into two sections, the summer blooming and the fall blooming varieties. Miss Lingard, a free flowering white, is one of the best of the early blooming ones.

The phlox, "W. C. Egan," here illustrated is a

chance seedling that came up in my garden, and belongs to this section, resembling Miss Lingard somewhat, but differs in having a white eye. It is a strong grower and carries good foliage down to the ground.

Tastes differ so, as to likes and dislikes in colors of flowers and there are so many colors in this group, that I will not attempt to name any of the late blooming ones.

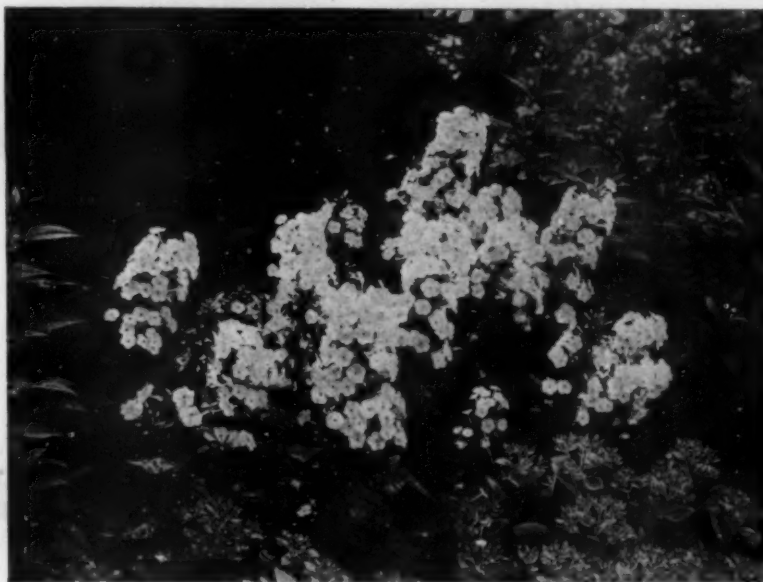
Their requirements are simple but imperative if good trusses of bloom and good foliage are desired. These are a fair amount of sunshine, and a rich, moist ground.

They are shallow rooters, and if the sun dries out the top earth, their flower heads are small and they become bare of foliage at the base. Some varieties

are inclined to lose their lower foliage any way, and should be planted behind lower growing material. Mulching benefits them immensely and copious watering overhead is an aid and keeps down the red spider. Very old manure, well broken up, makes a tidy looking mulch, or old leaf mould in which may be incorporated one quarter in bulk of powdered sheep manure, the benefits of which will seep down to the plant at each

wetting. Grass cut from the lawn is good, but should not be put on thick enough to mat and heat and thus injure any plant stems in contact with it. They are tall growers and apt to be thrown over by wind and storms; hence, staking becomes necessary.

If the slender points of bamboo, readily obtainable at any seedsman's store, are used, they may be staked without assuming a stiff, unnatural look. Use a thin, brown, wrapping twine, and in tying them or any plant, don't hug them up as you would a prodigal child, but choose four or five strong outer shoots, and set the stakes to them, drawing the plant stems outside the stake and let them run up along it, thus hiding to a great extent, its presence. Tie in place, then run the string around from stake to stake. If the center stems seem to have too much room and are inclined to lop over, run cross strings, and if necessary, loop the string once around the stem after you have placed it in the position it belongs.



NEW PHLOX, "W. C. EGAN"
Sedum spectabile in front

Don't mix colors. Choose the one you want and then use it in masses. If used in a bed, with other pinks and reds, be careful of clashing colors. The colors of many of the phlox are pugnacious, and fight with their companions. Remember that there are whites among them that may be used as peace-makers.

If you can't give them proper attention as to a moist situation, plenty of water, etc., in which case they are apt to lose their lower foliage, plant in front of them any lower growing, earlier blooming plant that retains good foliage late in the fall. *Iris graminea*, which blooms in May, is good for this purpose. It has dark green, narrow grass-like foliage, and is dense in growth.

Reset your plants every other year, renewing the soil or at least add more manure to it, if grown again

in the same position. I consider early spring the best time to replant in this climate. Some prefer early fall. To increase your stock, take up and divide the roots, or early in the fall take off cuttings from the young growth and root them in sand in the greenhouse. Keep them growing in the cooler part of the house and they will bloom well the following summer.

Cuttings may also be made from the new growth in the spring. For winter protection cover with manure or straw.

Young, self-sown seedlings will come up in the group. Remove them to some unoccupied part of your grounds. You are apt to get some good colors among them. Pull up the poorly colored ones, as you may want to use some elsewhere next year and would have forgotten which were the poor ones.

Some Old and New Annuals

By W. C. EGAN

THE Australian annual, *Helichrysum bracteatum*, has been in cultivation since 1799 and is one of the best of the group of everlastings, not only as a dried flower, but for its good qualities in garden decorations. As it is a constant blossomer when of fair size, the seeds should be sown early.

If sown in the greenhouse about the middle of February, and the plants carried on under heat, hardened off, and planted out when all danger of frost is past, it will commence to bloom in June and continue, interruptedly, until frost, reaching a height of over three feet in good soil.

The range of color is extensive, including a fine silvery-white, rose, red and yellow, with intermediate shades. In open, sunny positions in the shrubbery, or perennial beds, it is effective, producing a coloring not inclined to fight with its neighbors. It is easily raised from seed, but the chief point is to start it early.

Flowers intended for dried bouquets should be gathered when half opened, and hung head downwards in a cool shed. There are several varieties of this species to be found in the catalogues, including *H. monstrosum*.

There is a new annual from South Africa, new in this country, although known since 1871, called *Diascea Barberæ*, bearing continuously small chamois-rose-colored flowers. The name diascea is from *diaskeo*, in reference to its pretty flowers, and a Mrs. Barber was honored when its specific name was concocted. Being half hardy its seeds should be sown in the hotbed in March or April and planted out in June. It grows about a foot high, retaining good foliage all summer, blooming freely until frost.

It is one of the class that cleans itself of faded flowers. There is another "warm country" annual whose habit in many respects resembles the above and is well worth growing, but as the color of its flowers—a bright scarlet—does not harmonize with the diascea, they should not be planted near each other. This is the *Alonsoa Warscewiczii*, brought from Chili in 1858, and presumed to be a variety of *A. incisifolia*, a species much longer in cultivation.

This also is a constant bloomer, and neat in appearance. It does not open many flowers at a time, belonging more to the delicate, than showy order, but its foliage is so bright and clean and its flowers so cheerful and welcome, when many things are ragged and cut down by the early frosts, that it readily makes friends with flower-lovers. It equals the *Heuchera sanguinea* for giving a dash of color to a bouquet of the *Gypsophila paniculata*.

There is a new sunflower on the market that will please all those who admire the single forms of this extensive family. It is a hybrid perennial and stood the winter of 1903-4 in Adrian, Michigan, where its originators, Messrs. Nathan Smith & Sons, reside. They have given it the name of *Helianthus sparsifolia*.

The flowers are borne on very long, wiry stems, almost devoid of foliage, making them admirable subjects for cut-flower decorations. They are splendid keepers when cut. As near as I can remember its single flowers are a little over three inches in diameter, and a deep, rich yellow in color. It seems to possess a rugged constitution, and a plant that will be permanent and increase. It was very much admired on my grounds last summer.

SUGGESTIONS FOR THE MONTH

FOR THE HOUSE AND GARDEN



THE HOUSE

THIS is a busy month for the householder; for while old Dame Nature is washing the winter's dust off her face a surplus amount of water may leak in the roof or dampen the cellar, and when she shakes out her spring garments all the indoor furnishings will look dull and shabby in comparison. Look out for the roofing, attend to the drains, see that the cellar is aired and free from dampness, but don't make an uproar over house cleaning—do little by little, week by week, and before you know it the house will be in summer dress.

Early in April have the storm doors and windows removed and the exterior paint or stone work cleaned. If your front porch is of stone, and you want it redressed be careful to employ only a skilled workman. This is one of the many cases where it is most economical to obtain the best.

If painting is to be done have it done now, and if any important repairs or alterations are to be made which require carpentry or masonry have them begun without delay. They will cause less inconvenience at this time than later.

As soon as the windows have to be opened take down the lace curtains and put up muslin ones in their place. The dampness which is in the air rots the threads and the dust which blows either out or in makes the process of laundering more hazardous. Never put a curtain away without washing, but do not allow it to be starched. See that all the curtains are rinsed well, but put them in the chest rough dry until fall and then pin them on the frames after wetting in very thin starch water.

A great variety of pretty summer curtains come now—muslin, madras and other materials, which are far from costly and yet add much to the charm and comfort of a room. Linens, plain colored cotton goods, figured cretonnes and the like can also be effectively substituted for heavy inner curtains and draperies if desired. Possibly one will not wish to make the change in April, but even so it is well to determine upon materials at this time and have the curtains ready to go up when the warm days make them seem not only suitable but welcome. If one will give the time to searching or be on the outlook, excellent material for drapery can often be found among the summer dress goods which will be much

cheaper than any to be had of a house furnisher. What one should aim for in all summer furnishing is coolness and comfort; the windows do not by any means want to be swathed in muslins and draperies, but the light screened and the rooms made livable by freshness of material and pleasing color effects. Keep everything as simple as possible, do not unnecessarily multiply folds, and study the quality of the light with which you have to deal.

It is an excellent plan in April to get the furniture covers made and in readiness for use. These can be very attractive if a little taste is exercised in the selection of materials and do not need to be merely utilitarian. To be sure it is best to procure a material which will wash and to test the braid before using in order to ascertain whether or not it is a fast color. The old-fashioned covers which resembled nothing but linen dusters made patriotic by bindings of bright red and blue braid doubtless served their purpose but they did not add to the charm of the home. Figured materials may now be had in low, quiet tones which are really beautiful and no less serviceable.

Do not postpone having the rugs beaten or shaken and sunned, and see that the carpets are especially well swept at this time; for it is now that the moths do the most mischief. An ounce of prevention in the way of cleansing and care in the early spring is worth several pounds of camphor, moth balls and the like, used later.

The fur rugs and garments especially should be put away as early as possible, being first carefully brushed and examined and then securely tied up in newspapers. If it is possible to place them in cold storage for the summer it is of course safer, but if not, vigilant care will commonly prove effectual.

There is no time when flowers will be more welcome in the home or when they are much more readily obtainable. In the cities, street venders' trays offer a tempting array and out of town the garden and roadside invite theft. Do not be content to let the outdoor world have all the blossoms, but do not, on the other hand, be prodigal in your decorations—a little bowl of violets, or a jar filled with arbutus set on a table will be enough for a room, and are sufficiently precious to deserve undivided attention. A few jonquils in a tall vase placed against the right background will give vastly more pleasure than a

tub full of flowers scattered about indiscriminately. Nothing gives the human touch to a room more than flowers and in few ways is taste manifested more patent than in their arrangement.

THE GARDEN

All roses do better in a rather heavy, firm soil—one containing considerable clay—packed firmly about the roots. Roses set in loose, loamy soil often fail to show any growth and never bloom. While doing better in this firm soil, they require ample fertilization. Ashes worked into the soil are very beneficial. Bone meal is a good fertilizer, but old, well-rotted or pulverized manure cannot be excelled.

Roses require special attention this month. Pruning should be done before growth begins. Remove all old and weak wood. Secure symmetry by pruning to a proper balance the branches. In fact it is well to shorten all the leading branches—that forces the development of side branches and gives larger amount of blooming surface.

You can hardly manure roses too much, and the best manure is that from the old cow-pen. The older the manure the better, even to the extent of being so old that it is black and will crumble at the touch. Pulverized cow-pen products are now manufactured and sold on a commercial basis from the Union Stock Yards, Chicago. Unquestionably that is the best form of fertilizer to use about the roses, and it should be worked into the soil thoroughly.

Blackberries, gooseberries, raspberries and currants, as every gardener knows, should not make a rush growth, but a steady even growth, which means that they should be nourished little and often. An application of nitrate of soda or of pulverized manure every week or ten days, just before a rain, will show surprisingly fine results. Any fertilizer thus used should be such as is ready for immediate assimilation.

If you have not done so in the past, suppose you try a bed of balsam this year. The flowers are as double as roses, beautiful in color, and so frequently produced that the stalks are veritable wreaths of bloom. The profusion of foliage is the only drawback to the balsam, that hides the flowers but it can be obviated by clipping the leaves all up and down the stalk, just before the flowers open. This gives them opportunity to display their beauty to the best advantage.

It will be no experiment so far as results and satisfaction goes, if the yard has a bed of *Salpiglossis*. There are but few annuals which eclipse it in rich coloring, and gorgeous combinations of color.

Clean pots before using a second time. Bacteria are likely to be in the pores. To clean, give them a hot bath of strong soapsuds. Immerse them in a tub of hot water in which plenty of soap has been dissolved. When the water is cool enough to handle scrub them thoroughly inside and out, with a stiff brush. Another good way is to put them in a wash-boiler and boil them for ten or fifteen minutes. Very often plants potted in old, slime-covered pots refuse to make healthy growth and being put into new, or cleaner pots, they grow most satisfactorily.

See that arbor posts and strippings are in good condition before the grape and other vines begin to show growth. Be sure that all vines are tied up, that the roots are dug about, and fertilizers applied.

The best method of planting sweet peas is to dig a trench eight or ten inches deep, fill in three or four inches of well decomposed manure and add an inch or so of good soil. This leaves four or five inches of the trench unfilled. Embed the seed about an inch. When the vines are up and growing, gradually fill in earth around them until the surface of the trench is near but not quite level with the top of the adjacent ground. Sweet peas require a good deal of water and planting them below the surface is an aid in supplying necessary moisture. Pick the flowers daily if you desire them to bloom all season.

This is the month in which the surgeon of the yard must operate. Just as the surgeon operates on the human body, so must the gardener use the pruning shears on his plants. Where there is disease or signs of disease, prune without mercy. Cut away all diseased branches if it takes every one. It does not hurt a bush to cut it to the ground—that forces the roots to find an outlet for whatever vitality is left in them. If the roots are diseased, the thing to do is to uproot the plant, the sooner the better, and remove the old earth which lay about the diseased roots.

A good liquid manure for potted plants can be dipped up from the barn-yard after a shower, but in that state it is too strong for the plants and requires dilution to about the color of weak table tea before being applied. It is an easy matter to keep the manure in this form by putting it in an earthen jar or wooden keg and keeping it covered.

Plants require their richest nourishing when their fine spraying rootlets are new and tender. If they do not get it then, the rootlets quickly harden to a small size and will not expand or extend sufficiently for the plants to get full nourishment later on. The loss cannot be made up after the hardening process has set in.

THE EDITOR'S TALKS AND CORRESPONDENCE



The Editor wishes to extend a personal invitation to all readers of *House and Garden* to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice given.

THE TREATMENT OF WALLS OF NEW HOUSES

A RECENT letter addressed to this department asks why the treatment of the walls of new houses is not given more consideration. The writer makes the point that during the initial year in the new home the occupants do not enjoy living in unbeautiful rooms, nor the unsettled feeling that necessarily arises when one feels that there is yet an important feature of the house decoration to be attended to. Certainly this department of *HOUSE AND GARDEN* has never advised living in a house with cold, white plastered walls even temporarily. There are so many and such simple and inexpensive ways of treating these walls with really satisfactory results that it seems an unnecessary economy for even the most careful householder.

Many decorators mix their own colors for tinting both in water-color and oil paints. There are now, however, manufacturers who put out excellent colors which are ready mixed for application. In water-color tinting, many people have objected to the addition of glue to the mixture, claiming it is unsanitary, and to them a wall tint which is entirely without this objection, appeals largely. Beautiful, rich strong colors may be secured in these tints as well as the more delicate tones. Olive and moss green, mulberry red and mahogany reds, leaf brown, and rich orange, are all among the successful colors, which are also sanitary. Soft ecru, pale fawn, turquoise-blue and Colonial yellow are the best of the lighter shades.

Many people favor the rough or sand plaster tinted wall and hold to this finish. It is a simple task to have such walls re-tinted at any time. To avoid the monotony of plain walls for the entire house an effective combination may be made by using an upper third of wall-paper, the joining to be finished by a plate rail or a medium heavy mold, like the standing woodwork of the room. If a side wall-paper of pronounced design is selected, the lower edge can be cut out following the design. This is directly

applied to the tinted wall, giving a most attractive and decorative effect. The additional cost is very little and when the background of the paper, or some part of the figured design is repeated in the color of the wall, the result is harmonious and pleasing.

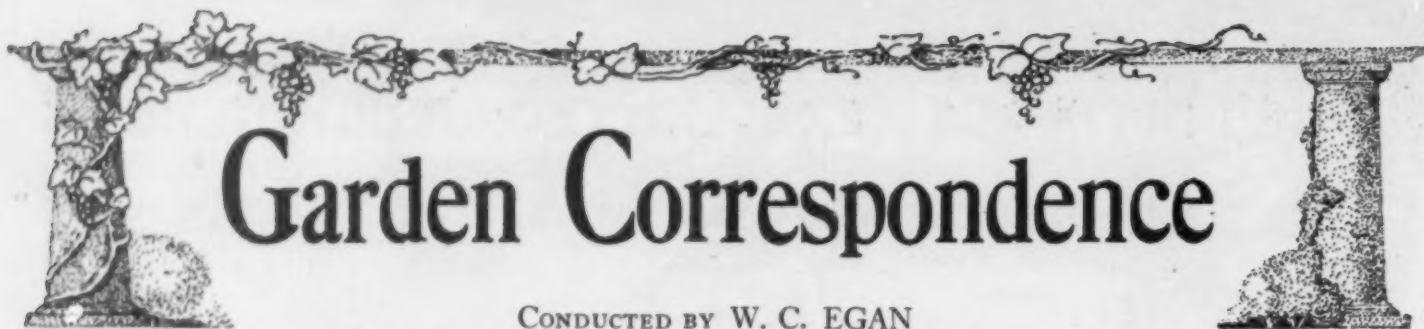
In selecting the color for the wall tint, the standing woodwork must also be considered. While the sand finish plaster is advised for the walls of the house which are to be permanently tinted, smooth plaster should be provided if it is the intention of the occupant to paper the walls after the "house has settled."

There are many friezes now offered which run from ten to twenty-four inches in width, and are very beautiful in color and design. Among the imported friezes are some of English make: one a blue and white Delft hand blocked frieze costs \$4.50 a roll of eight yards. This frieze shows, clearly outlined against a gray-blue sky, cleverly drawn fishing boats on ripply blue water. The same design is shown with pastel green boats against a yellow sky. Another marine frieze presents Norsemen's ships in colors gray-blue, old rose, and darkest green. This is a sturdy and most attractive frieze for the room in which mission or Craftsman furniture is used.

Among the less expensive friezes of domestic make are shown some excellent designs and colors. These run in price from fifty cents to \$2.00 a roll. In shades of yellow, leaf brown, dull green, and blue, is a frieze of poster design, showing straight trees, with a quaint bit of landscape beyond, against a yellow background. Another, suitable for a country house hall or library, has straight boles of mahogany brown trees against a gold ground and leaping deer pursued by hounds. This frieze comes with an extension, showing the same trees and background, so there need only be introduced occasional panels of the deer and dogs. The price of this is \$1.60 a roll.

A charming frieze for a bedroom shows conventionally symmetrical garlands of roses and leaves held together by floating blue ribbons. The price

(Continued on page 16, Advertising Section.)



Garden Correspondence

CONDUCTED BY W. C. EGAN

THE ARTISTIC ARRANGEMENT OF FLOWERS

I WAS much interested in the article entitled "The Artistic Arrangement of Flowers" in your January issue. It stated that flowers "with soft, slender stems, should always be arranged in low, wide-topped bowls so they can ramble over the sides."

All this is true, but often it is the rule that those in the center lop over against those on the outer rim and cause a lumpy effect.

Perhaps your Garden Correspondent can tell us how that may be remedied. L. J. E.

Go to your tinsmith and have him make two flat disks of copper or galvanized iron wire, or silvered wire, if expense is no object. Have one slightly less in diameter than that of the inside of your bowl—say half an inch below the rim and the other disk to fit at a point one half or a full inch from the bottom. This disk is composed of a circular outer rim, having wires run across so as to form an open mesh about one inch square.

Have three "legs" of stiff wire, running from the larger disk to a half or a full inch beyond where the bottom disk is attached. This forms two shelves of wire mesh one directly over the other. Flower stems placed within these meshes are held by the wire at two points along their course and are thus held in a comparatively upright position. Any deflection from this position required may be obtained by slanting the lower part of the stem and inserting in the proper mesh in the lower disk.

These wire frames are also very useful when made to fit large vases where any heavy-headed flowers, like peonies, are used. A very decorative arrangement may be had by obtaining a small wicker basket, or some of the fancy vase or urn-shaped waste baskets, and having a water-tight, tin receptacle made to fit, and also a wire frame upon the same lines described above.

Be careful in selecting the baskets, avoiding high colors and endeavoring to obtain a neutral tone. If you see one whose outline suits you, but its color does not,—you can paint it. Some florist who is intimately acquainted with firms whose business is that of wire work, can have the frames made for you.

BLOOMING OF COLUMBINES AND DELPHINIUMS

Will columbines and delphiniums bloom the same season they are sown? A. F. M.

Columbines seldom bloom until the second season, but the delphinium will if sown early. Get Dreer's Gold Medal hybrids or Lemoine's hybrids and sow early, and in a majority of plants you can have two seasons of blooms the same year, if the first is not allowed to go to seed.

SAFETY OF LIQUID WEED DESTROYERS

Are the liquid weed destroyers for road and walks safe to use? S. O. P.

Yes, if care is used. Select a day when it is not liable to rain for twenty-four hours. Give the surface to be covered a slight sprinkling with clean water, and then apply the liquid, keeping away from near the roots of the grass or adjoining shrubs. If rain comes and washes the material down hill to plants not desired to kill, trouble is apt to follow.

WILD FLOWERS FOR THE ROADSIDE

I have a roadway running back to my barn, part of which is through a woods. I would like to have some wild flowers bordering it. Something that would take care of itself. The soil is fairly rich. I don't want to go to much expense. C. W. E.

Go into the open spaces of the woods and select any flowering plants you see there, mark them so as to identify them for fall removal. Strong growing plants, like asters and golden rod, may be taken up when in bloom, cutting off the flowering stems to within one foot of the ground and giving them a good soaking when planted. They may be heeled in, in some vacant space and well watered and be planted later in the fall or the following spring. Obtain some seed of the *Hesperis matronalis* and of *Rudbeckia laciniata* and loosen up the soil here and there and sow them, making informal groups or colonies of them. The former is a perennial with pinkish flowers blooming in the spring and is not at all particular as to soil or situation. The latter is a biennial, but sows itself so freely that you will always have it. It may be termed a fall blooming, improved "Black-eyed Susan."

THE STABLE AND KENNEL

EDITED BY JOHN GILMER SPEED

The purpose of this department is to give advice to those who have country or suburban places as to the purchase, keep and treatment of horses, cows, dogs, poultry, etc. Careful attention will be given each inquiry, the letter and answer being published in due time for the benefit of other readers. Where an early reply is desired if a self-addressed, stamped envelope is enclosed the answer will be sent. No charge is made for advice given.

Kindness in Horse Training

By ERNEST C. MOSES

ALMOST second in importance to the problem which confronts all humankind of finding and practicing the best ways of treating one another, is the problem of how best to treat the animals, especially our horses which play (and work) such an important part in man's pleasures and necessities. While we can indeed most gratefully admit that comparisons between the chronicles of history and current events bring out gratifying evidences of progress in the solution of all the problems affecting the co-operations of men and their treatment of animals, there is yet ample scope for improvement in methods of humane care and control of the lower kingdom. That men do not better understand and better succeed in proving their God-given dominion over the animal kingdom is largely because they do not understand themselves, and their own innate capacity to rightfully influence the animals committed to their responsible charge.

It is indeed demonstrable that man's influence over the animals depends very largely on his own mental habits and attitude, not on the animals, although they do seem to differ in their degrees of responsiveness to man's superior intelligence. When men or boys fail to win the affection and obedience of their horses it is because they have not themselves learned to obey the promptings of a better nature; they have not learned the lessons of the right kind of self-control. In fact they do not get the right results because they fail to grasp and use the right rule of control. When men exercise self-control within, outwardly displayed

in patience, kindness and wise care of the horse, the animal responds most quickly to the master thought, generously repaying the owner or trainer for well directed efforts along this line. I can best illustrate this verity by relating an incident which came under my observation during a visit made to Europe in 1901.



AN EXCHANGE OF FRIENDLY GREETINGS

While visiting at the little stone villa of Captain Arthur Fonjallaz in the city of Coire, Canton Grison, in Switzerland, I was much impressed by a beautiful young gelding, which he frequently rode. My friend was then an instructor in the Swiss Military School of Coire and in keeping with the custom of officials of his rank and position in the institution, his horse was an object of great interest and admiration. My host often spoke to me of the very interesting attachment which existed between the horse and his caretaker (called in Switzerland the *domestique*), and one day he invited me to visit the stables and witness some demonstrations of this affection between the beautiful animal and his

caretaker. The horse came from Northern Germany and answered to the name of "Friede."

In accordance with the custom of the country I had been waited upon in my room and at the table by my friend's man-servant, and was much impressed by his obliging, genial and gentle disposition. In fact he was so quiet, so attentive, and naturally free from servility that I was glad to accept the invitation and observe the influence of a kindly character upon an animal whose appearance and action indicated

the operations of an unusual training. Immediately upon our arrival at the stable the *domestique*, with unconcealed pleasure at having an opportunity to exhibit his master's horse, led the animal out into the open. While my friend was pointing out the various marks of distinction and value which had justified an investment of five thousand francs (a rather high price for a horse in Switzerland), the *domestique* gently stroked his neck and head in a kindly manner and invited the horse to give him a kiss. The horse responded by nibbling at the cheek of the man in a very affectionate and playful manner, as illus-

trated in the accompanying engraving made from a photograph of the horse and his friend in this attitude of reciprocal amity. In other ways the horse gave ready evidence of a natural rapport and understanding between him and his genial care-taker. Every action displayed a lien of regard which knew no fear or artificial force, for I was told that the young animal had never been corporeally punished, although other and more sane corrective measures had been exercised.

After a few exchanges of friendly civilities, the *domestique* suddenly took off the halter and clapped his hands, whereupon the liberated animal with mane and tail in the air, nostrils expanded, and gracefully spirited in every movement, galloped off into an adjoining field rich with meadow-grass and fine grazing. No horse in finest equipage imaginable could have presented a more beautiful sight. Free in every muscle and limb, he gracefully exhibited the charm of animal life in its most interesting expression,—as

in nature, unfettered and free from all artificial trammels.

Finally, after we had witnessed and enjoyed this

most interesting scene for a few minutes, as if to focus and fully emphasize the character of the relations which were of common experience between the goodly, simple hearted man and his correspondingly good horse, the *domestique* gently called the horse by name to come back to him. No effort was made to coax the animal or to conceal the tether. It seemed to be something of a test of this delightful animal's devotion and obedience and it

seemed natural for me to wonder: would he obey the gentle master-voice and leave the rich grazing? Would he desert the opportunity for horse-play and the enjoyable freedom of a bright, clear September day? But the doubts quickly gave way to intelligent demonstration, on the part of the horse. Almost instantly upon hearing the familiar voice, he stopped his delectable grazing, raised his head in recognition of the summons, and trotted up to his undermaster with an obedience which was very notable for its martial precision and promptness. He submitted to the halter without the slightest indication of caprice or necessity for coaxing, and was led back to his box stall after having played his part in the simple drama with consummate loyalty and devotion to the guiding thought.

It was very evident from the action of the horse that he responded most naturally

to the kindness and directive impulse of his trainer. Indeed it was apparent that the horse had no other thought than to immediately obey, for all of his



"FRIEDE" AND HIS UNDERMASTER



CAPTAIN FONJALLAZ AND HIS HORSE

The Stable and Kennel

training had been along this line from the time he was first broken to bit and bridle.

This incident, above all I have ever witnessed in animal life, gave me a clear conception of the love and obedience which the horse in private life, apart from exhibition circles, is capable of manifesting. The exhibition added much stimulus to an underlying belief that the equine friend of man is indeed most responsive to training and treatment, influenced by kindness, mercy, patience and love. When men learn the genuine potency of the gentle methods of treating their fellowmen and animals, their horses will surely be among the first to respond to the more humane training involved. The responsibility for the best development of animal character rests on the exemplary influence of men and women—not on their horses or other subordinate creatures. It is always the prerogative and duty of higher manifestations of intelligence to rightfully influence and encourage the lesser.

This circumstance of the Swiss domestic and his most tractable animal was a spontaneous result accomplished with child-like natural simplicity. And therein, like the wild flora of the rugged Alps, is found the beneficial significance of the encouraging lesson which it illustrates. Our best lessons in animal or human life are not found in ritual, rubric, or in the problems of profound philosophies, but in the unexpected and commonplace occurrences of life which need only to be observed and studied a little to reveal the beauties and fragrance of the inner blossom.

We often observe the effects of concentrated training of animals in exhibitions wherein trainers display the results of continuous specialized attention to horses, dogs, seals and other representatives of the lower kingdom, merely for the purpose of amusing people and illustrating the scope and influence of human intelligence. But these manifestations are the products of expert concentrated attention on animals which act and pose largely for the purpose of amusing children and adults. In these exhibitions of control and training, kindness seems to be used in perfunctory ways, but the whip in hand indicates that it may often play a part in forcing issues which do not illustrate the best methods or bring out results which

are truly beneficial in the higher development of animals.

In the incident herein narrated of the Swiss horse, the whip, or control merely for exhibition purposes were not the strong factors; the circumstance illustrated natural results which were always apparent in the practical every day life of horse and trainer, or horse and master, and go to show the possibilities of better practical relations between man and beast wherever the one serves the other.

At the recent annual meeting of the American Humane Association at Boston, the president, Dr. Stillman, called attention to the two sides of philanthropy, the humanitarian and the commercial. On the one hand, the anti-cruelty movement presents itself as an encouragement and an opportunity to be kind. On the other hand, nothing can be surer than

that to the world collectively regard for human and animal life pays. State ornithologists estimate that the wanton destruction of bird life means the loss of crops amounting to the value of \$800,000,000 each year. The annual loss in cattle and sheep through neglect and exposure is over \$24,000,000, according to the department of agriculture. Loss is measured more easily than profit, but if cruelty costs this



"FRIEDE" IN A PARADE, AT VEVEY, SWITZERLAND, 1905

much, kindness must have saved many times as much.

It is estimated that the 25,000,000 horses and mules in the United States live on an average five years less than if they were treated with greater care. An addition of five years to the life of each of these animals would be worth hundreds of millions of dollars. Much cruelty which cannot be cured by any appeal to sentiment would be stopped if the perpetrators could be made to see how they are injuring themselves financially.

Kindness to animals has its cash value to a community. Kindness to human beings has a greater value. The cost of the machinery for the punishment of criminals is greater than it ought to be. Among criminals some are degenerate or defective mentally, so that no early training could have prevented them from going wrong, but in many other cases a little more attention paid by the State to ignorant and neglected children would have been cheaper than punishment. The State not only loses money

on the criminal classes but suffers a loss from the low vitality of many whose lives are cut short or rendered nonproductive through lack of simple teaching how to live, or lack of State regulation of unhealthful

industries, or other failure of human kindness. If it is true that this is a commercial age, it is well to emphasize the 'commercial side of philanthropy, using the word in its broadest sense.

The Virginia Razorback

By JOHN GILMER SPEED

THERE are some who contend that the razorback hog of Virginia and other parts of the South is a wild hog. If he be wild he is so because he has become so, just as the wild horses of the plains, the mustangs, became wild. There were no hogs in this country when the white people came. They were brought over by the early settlers. Doubtless these razorbacks are descended from the European hogs that were undisturbed in the forest, breeding and feeding as they chose. At any rate they became quite wild and I can recall as a boy seeing boars that seemed to me as good game as any one wanted to hunt. Certainly the flesh has a decidedly game flavor. One of the present writer's ancestors who had been badly crippled by a wound in the War of the Revolution was killed by a wild sow in the woods of his Kentucky estate. Exactly how it happened no one ever knew. In the forests of Virginia these hogs are often encountered feeding upon the acorns and other nuts that fall, burrowing for the roots that they so well know how to find. From the chief packer of these famous Virginia hams—and this establishment was started in Smithfield in 1789—I have a letter describing the kind of hog used to make these world-renowned hams.

"These hogs," he says, "are long legged and lean and feed in the forest in the spring and summer. In the autumn they are turned into the peanut fields and about thirty days before they are killed they are fed on corn. This makes the meat firmer and gives it a sweet flavor. It takes about twelve months to cure and fully prepare this ham for market. Some of our epicures seem to think the ham is better at two years old, but our judgment is it is just as good at one year old as at any other period. We are now shipping to every part of this country and also to England, France and Germany."

I think I hold with those who believe in the older

ham being the better. It has a greater distinction of flavor. I recently came across directions for boiling a ham of this kind prepared by the late Mrs. William C. Bullitt, of Kentucky, a *grande dame* of the olden time and also a most notable housekeeper. She said: "If the ham is quite old it should be soaked in water over night; if not over a year old this is not necessary. It should be placed in a

pot and fully covered with water and the pot put on the back of the stove so that the water will only simmer but never come to an active bubbling boil. It should be permitted to simmer as many hours as there are pounds in the ham, i. e., a twelve pound ham twelve hours. Then it should be removed from the stove, taken out of the water and allowed to cool and drain. When cool the skin should be removed and the ham covered with a mixture of grated bread crumbs, spices and brown sugar and placed in the oven until it has become brown.

Then it should be removed and permitted to get entirely cool before it is cut. Never put a knife into a hot or even a warm ham. The juices of a hot ham follow the knife and half the excellence is wasted. The colder the ham is when served the better."

I have seen men use condiments such as mustard or Worcester sauce on such hams as I have described. This is a very great mistake, as either spoils the fine flavor of the meat itself. I suspect any one I see doing this of having a degenerate palate or none at all. An Englishman would do such a thing, of course, but an American—no. I once knew a little girl who was visiting in England. By way of making conversation at luncheon, she said to her hostess: "They eat more mustard in England than we do in America."

"Do you not use mustard in America?" her hostess inquired.

"Oh, yes, but mostly for plasters."



THE RAZORBACK HOG

SCOTCH TERRIERS

BY J. A. GLASSE

THE Scotch terrier is one of the most useful and amusing pets in the canine family. Useful as a watch-dog and amusing in its wilfulness.

In that interesting book, "Lockhart's Life of Sir Walter Scott," an account is given of how in his early days as an advocate, Scott was unsuccessful in defending a notorious housebreaker.



SCOTCH TERRIER

New Castle Kennels, Brookline, Mass.

After the trial the condemned man asked the young lawyer to visit him in prison. Scott's curiosity took him, and when they were alone in the cell the man said he was sorry he had no fee to offer him but would give him two bits of advice as a legacy. The first was that when he should come to have a house of his own not to keep a large watch-dog out-of-doors, but to tie a little, tight, yelping terrier within. The second bit of advice was about the lock of the door. Thirty years after, telling this story at a judge's dinner at Jedburgh, Scott summed up with a rhyme:

"Yelping terrier, rusty key,
Was Walter Scott's best Jeddart fee."

I once saw an instance of sagacity in one of these little dogs that showed not only wilfulness but independence of thought. I was in an omnibus in the outskirts of London when a military looking man came in, followed, as he thought, by his dog, a small wiry-haired terrier. Instead of following his master into the omnibus the dog mounted the steps and went outside. Although summer the evening was cool and this, no doubt, was the reason his master rode inside. Perhaps he had been in a warm climate for it was in a western district of

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AGENTS: H. M. Hooker Co., 128 W. Washington St., Chicago; W. S. Hueston, 22 E. 22d St., New York; John D. S. Potts, 218 Race St., Philadelphia; F. H. McDonald, 619 The Gilbert, Grand Rapids; F. T. Crowe & Co., Seattle, Spokane, Tacoma, Wash., and Portland, Ore.; Klatt-Hirsch & Co., 113 Front St., San Francisco, Cal.

FLO-WHITE

The selection of the finish for the walls and standing woodwork in the kitchen, pantries and bath-rooms of a residence is a detail of supreme importance to the householder. To render these sanitary is the first consideration, and to give the walls and woodwork a permanent finish and one which is suitable and pleasing to the eye is the architect's responsibility.

Flo-White, the most recent product of Chicago Varnish Company, fully meets these requirements and has aroused a very unusual interest, and wherever it is specified and used the most enthusiastic praise from client and architect. The many points of superiority of this enamel over products prepared for like uses can readily be seen.

In application it flows easily under the brush, and shows no brush-marks in drying.

Its surface is of wonderful brilliancy, and is hard and smooth like glass.

As a substitute for tile it is especially valuable applied to wainscot or entire side walls.

For Hotels, Cafés, Barber Shops, Hair-dressing and Manicure Parlors it is particularly satisfactory.

In the ideal kitchen of an ideal house, decorated and furnished by Margaret Greenleaf, the consulting decorator of Chicago Varnish Company, Flo-White was used over hard plaster marked off in 6-inch squares before the plaster hardened.

This little kitchen is the pride of the housewife—clean, bright and shining. Its glistening white walls and polished yellow maple floor (left in the natural color and finished with two coats of Chicago Varnish Company's Supremis), make an attractive setting for the brick red range with its spreading copper hood. Blue and white ware and shining long-handled frying-pans decorate the shelves.

The little casement window has diamond panes daintily hung with clear, crisp, white muslin. The whole effect is quaint and charming. Write Margaret Greenleaf for advice on the finish of the standing wood-work of your house; she will recommend a complete color scheme illustrated by samples if you send your plans. No charge whatever is made for the service if you are using Chicago Varnish Company's materials, as this offer is made by the Company only to their customers.

35 DEARBORN AVENUE
CHICAGO, ILL.

CHICAGO VARNISH CO. 36 VESEY STREET
NEW YORK CITY



BLACK AND TAN TERRIER, "BEAUTY"
Manchester Kennels, Minneapolis, Minn.

London in which many men who have seen service in India make their quarters. The hardy little dog did not feel the chill of the evening so preferred the top of the omnibus. Sitting down the old soldier looked for his little companion to take him on his knee. Not seeing him he rose from his seat looking as if he would say, "As he won't follow me I must follow the dog this time."

These two examples prove their useful and amusing traits and many touching stories could be told of their faithfulness and devotion.

CROSSING BREEDS

OCCASIONALLY there are owners of flocks who have taken up an unusually deep interest in them and who, for the sake of variety and the pleasure of the pursuit, conceive the idea that some reputation, if not profit, may be gained by the founding of a new breed of sheep, the reputation of which may be connected with their names through long time to come. About thirty years ago there were two distinct efforts made in this direction by well known breeders to combine the good points of some of each of different breeds in such a way as to produce in the progeny a more valuable animal than either of the parents. The skilled art and experience of both of these enthusiasts were brought into requisition for some years, but the labor was in vain, and in both cases the progeny of these sheep quite failed to show

(Continued on page 16.)

GILSON Gasoline Engine and Pumping Jack
JACKS TO FIT ANY STYLE PUMP.
\$70.00 Complete. Every country home supplied with our system always has water. Will run ice cream freezer, churn, washing machine, etc., etc.
"GOES LIKE SIXTY."
SEND FOR CATALOG ALL SIZES
GILSON MFG. CO., 424 Park St., Pt. Washington, Wis.

AMERICAN NURSERY COMPANY
COMBINING
FRED'K W. KELSEY, New York City.
F. & F. NURSERIES, Springfield, N. J.
BLOODGOOD NURSERIES, Flushing, L. I.
N. J. & L. I. NURSERIES.
HUNDREDS OF ACRES:
Trees, Shrubs, Evergreens, Roses,
Herbaceous Plants, Vines, etc.
Everything for country estates, parks and cemeteries.
Beautiful 1908 catalogue now ready. Consultation and inspection invited.
COMPLETE ESTIMATES FURNISHED.
Sales Department:
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The World's Finest Nursery Products

ROSES. Our Roses will tell their own story when the blooming season comes. All our bushes are strong and will bloom profusely all the Summer.

SHADE AND FRUIT TREES. No home is complete without these two necessities. We carry a large variety.

PERGOLA VINES. Don't hesitate to place your orders with us at once. We grow them by the thousands; you can see them—that is the only way to buy Nursery products.

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EVERGREENS. We have many thousands from 1 to 10 feet tall, in all the finest and handsomest varieties. The specimens now growing in our Nurseries are conceded to be the finest ever produced in America.

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OUR ILLUSTRATED GENERAL CATALOGUE No. 18 will tell you about the above and all our other products for Lawns and Gardens. Ask for it.

You can visit our Nursery by taking the McAdoo Tube Trains to Hoboken, which connect with the White Line Electric Cars passing our Nursery.

BOBBINK & ATKINS,

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GARDEN BENCHES

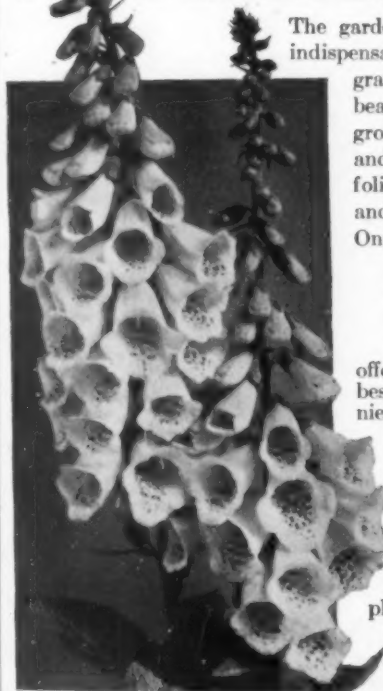
ONE of our specialties is Garden Benches. Decorative, useful, there is a certain elegance about the stone bench in the garden setting which bespeaks most strongly the taste of the owner. In Marble, Stone and Pompeian Stone, which successfully withstands the American climate.

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The garden of hardy perennials is an indispensable adjunct to the home. These grand plants increase in size and beauty every year, bursting into growth with the advent of Spring and giving a wealth of flowers and foliage. They are easy of culture and thrive in any good garden soil. Once started they are permanent.

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offers a choice assortment of the best and showiest perennials. Peonies, Irises, Phloxes, Foxgloves and all the old garden favorites are here. Seventeen pages in the Biltmore Nursery catalogue are devoted to their descriptions—more than 300 varieties are listed.

This splendid catalogue will be sent free to any address, on application. It contains 196 pages, and is the most beautiful as well as the most practical nursery catalogue yet published.

Biltmore Nursery, Box 143, Biltmore, N. C.

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The Most Durable and Economical
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Beautiful Designs Effective Colorings

Noiseless, waterproof and non-absorbent

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It is sanitary, beautiful and a durable rubber floor covering.

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POSITIVELY THE BEST & PUREST MADE.
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QUALITY & FLAVOR STAND UNAPPROACHED.
1/4 & 1/2 lb. TIN CANISTERS.



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(PINK WRAPPER)
VANILLA CHOCOLATE
OF ACKNOWLEDGED SUPERIORITY.
1/4, 1/2 & 1/2 lb. CAKES.
SOLD AT OUR STORES & BY GROCERS EVERYWHERE



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The Box that Lox
TOILET POWDER

At Easter Tide

when custom decrees that men, and especially women, should look their best, the raw spring winds cause much damage to tender skins and complexions.

Mennen's Borated Talcum Toilet Powder

is then doubly necessary. It soothes and heals the skin, prevents Chapping, Chafing, Prickly Heat, Sunburn and all skin troubles of summer. After bathing and shaving it is delightful, and in the nursery indispensable.

For your protection the genuine is put up in non-refillable boxes—the "Box that Lox," with Mennen's face on top. Guaranteed under the Food and Drugs Act, June 30, 1938. Serial No. 142. Sold everywhere, or by mail 25 cents. Sample free.

GERHARD MENNEN CO., Newark, N. J.

Try Mennen's Violet (Borated) Talcum Toilet Powder—it has the scent of fresh-cut Parma Violets.

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Offers of their late importation from Holland a fine stock of Iris, Paeonias, Roses and some evergreens; of their own growing a large selection of ornamental and shade trees, evergreens, shrubs, vines and fruit trees. Catalogues sent free on application. Address

THE MORRIS NURSERY CO.,
WEST CHESTER, PA.

any points of value. But what was more disappointing there was nothing to show after several years of patient strife with constant unsatisfactory results but a lot of mongrels, none having any point of value or even promise or probability of it. Thus was history once more vindicated, and the old story told over again "that nature has its own ways in regard to the breeding of animals and that the evident design of nature in this respect is to preserve all races permanently distinct."

There is a scientific principle involved in this general result in the reproduction of animals, just the same as there is in the same way with plants. Nature seems to have made the rule that species should be continued by making them able only to perpetuate themselves, in their own distinct line, and that they should be forever unable to mingle with others and in this way upset the distinct peculiarities thus naturally fixed for the preservation of each and all permanently. And to secure this distinct separation it seems to have been made the irrevocable law of Nature that closely related species, singularly, should not have the ability to interbreed successfully and thus wholly undermine the plans on which Nature was originally founded, by rapid deterioration.

Thus the rule is apparently that breeds should be perpetuated permanently and so preserve their most vigorous progeny for the increase of the race, not only by natural selection, but equally by the power and ability to dominate over their companions.

Nature makes no distinctions between great and small, and its laws apply to all alike indiscriminately. It could not be otherwise if the world is to exist permanently. And thus it has been, and is, and apparently ever will be, as long as the world remains.

Now, if these propositions are true, then the changing of natural laws for the advantage or whim of mankind is difficult, uncertain or impossible. And the breeder who tries to turn them from their established course is placed in strife with this invulnerable and irresistible force and is obliged to submit to its laws and rules, and, if otherwise, he is defeated.

If this is the case then we must agree to the inevitable, and once for all establish the rule that any intermixture of related blood in any flock is sure to be disastrous and in the end destructive.

Then when such a proposition is made as this we may ask, "What will probably be the result of breeding together the progeny of the same parents in an effort to establish any uniformity of character in any selected flock, expected to reproduce required characteristics, so as to make in the end a new breed, possessing some valuable new points?" To this we can only say that every rule of natural laws and every occurrence in natural history is inconsistent with any hope of success, and further are all in direct antagonism with such hope.

At about regular intervals there appears some individual strongly imbued with a desire to make a reputation or obtain some notoriety by producing some new breed of sheep, with no other intention apparently than to establish credit for doing a remarkable thing. Just at the present time there are at least two propositions on foot, and having been approached for some possible encouragement, we have to say that it is a hopeless case, as much so as to expect to find a gold mine appear in the morning after one has blasted a hole in the back yard of his home. All experience proves this, even that of those prominent breeders such as Bakewell, the originator of the magnificent Leicester, Webb and other noted improvers of the South-down, and the few others who in a lifetime work left still much to be done by their successors. In fact, the best sheep breeders find enough to do to maintain their flocks in standard condition without trying experiments in the way of making new difficulties to encounter.

Let us preserve and keep what we have, improving if possible, and when something new is wanted by the world and we know what is wanted, it will be easy to repeat what has been done before.—*Ancient Shepherd in the American Sheep Breeder.*

The illustration to the article on the Razorback Hog, page 146, was supplied by the Todd Company, Smithfield, Virginia.

THE EDITOR'S TALKS

(Continued from page 141.)

of this is \$1.80 a roll. It may be applied on a pale blue, cream, or pastel green or pink wall. There is a dainty side wall-paper which comes with this and is seventy-two cents a roll of eight yards, in color a pale creamy yellow

with a two-toned effect of clustered dots on its surface.

Domestic wall-papers of fresh crisp coloring and really exquisite designs are found at extremely low prices. Among these is a paper showing clusters of richly colored roses against a creamy ground at thirty-six cents a roll of eight yards. A French design of bouquets of small rose buds and forget-me-nots on an oyster white ground is twenty-four cents. Yellow poppies apparently thrown with a careless hand on white ground is twenty-two cents.

Many of the so-called ceiling papers make most attractive side walls, while quite impossible for the ceilings. Speaking of ceilings, the color chosen for the tint, or plain paper for the covering of these, is very important. In many rooms a purely white ceiling is entirely out of harmony with the side walls. There are plain papers made for ceilings at twenty-four cents a roll, which come in a wide range of delicate tints. Also the prepared wall tints to which we have previously referred furnish several acceptable shades for this use.

DETAIL IN FURNISHING

It has been the intention and endeavor in these talks to strongly urge the necessity of considering every detail in the interior finish of the house. This includes hardware, tiles, lighting fixtures, as well as color and finish for standing woodwork and floors. Equal attention should be given to detail in furnishing. When an acceptable setting and background be achieved, with suitable pieces of furniture well placed, the picture is ready for the final touches which give life and character to the whole. These come in with the selection and grouping of pictures and ornaments for mantel shelf and tables, screens, table covers, covering of cushions and lamp shades, —all can make or mar a room. The arranging of ferns and small plants is an important decorative feature. These must be properly placed in the room and set in jardinières or bowls, which are entirely suitable to the room, and of plain color whether of pottery, metal or porcelain.

A clever woman has invented a tiny screen to place on the tabourette or low stand holding a palm or fern in its unbeautiful earthenware crock. This screen is made on the lines of a lamp

Preserve and Beautify Your Shingles



Clark & Russell, Architects, Boston

by staining them with

Cabot's Shingle Stains

They are made of Creosote ("the best wood preservative known"), pure linseed oil, and the best pigments, and give soft, velvety coloring effects (moss greens, bark browns, silver grays, etc.) that look better and wear better than any others. 50% cheaper than paint.

Send for stained wood samples and catalogue

SAMUEL CABOT, Sole Manufacturer

141 Milk Street, Boston, Mass.

Agents at all Central Points

Cabot's Sheathing "Quilt" makes warm houses



What Good Paint Saves

WHEN you paint a house, the cost and the colors have most careful consideration.

Before you figure-it-out, a low-price-per-gallon paint looks cheapest. But let's see:

Suppose you were going to paint; for instance, a house like the one above. We'll estimate the total surface to be covered at 10,000 square feet. We'll compare the cost of the paint only—the good paint and the cheap paint—assuming the labor to be the same in both cases. Now good paint—Lowe Brothers "High Standard"—will cover 350 or more square feet to the gallon, two coats, and a paint made to sell at a cheap price per gallon or a "strictly pure hand-mixed-by-guess" will cover approximately 200 to 250 square feet two coats. This means that it will require 30 gallons of "High Standard" Paint, and of the cheap paint 45 gallons, or 15 gallons more. Suppose that the "High Standard" Paint costs 40 cents per gallon more than the cheap—sounds big, doesn't it? Still the cheap paint or "hand-mixed" would really cost at current prices \$8.25 more than the

Lowe Brothers High Standard Liquid Paint

for this work. That isn't all. The Lowe Brothers Paint will last five years and more, and the other not over three.

At current prices, therefore, "High Standard" Paint will cost \$9.75 per year less than cheap or "hand-mixed." Worth saving isn't it?

Another thing—with "High Standard" Paint properly put on, there's no chalking or peeling or cracking as with "hand-mixed" or cheap paint—the surface is left in good condition for repainting without scraping or burning-off.

Do you see the advantage of the distinctive wearing quality of "High Standard" Liquid Paint?

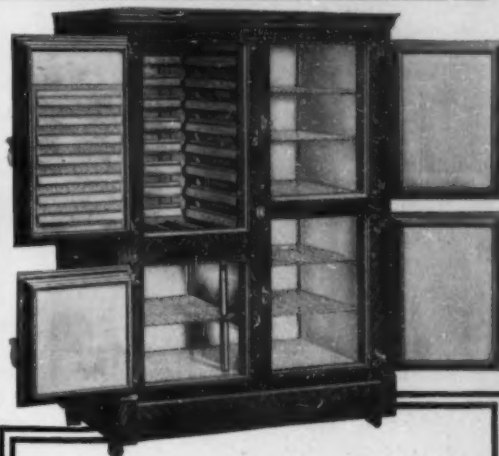
As to color—"High Standard" Paint offers the most durable and beautiful colors, in large variety. If you are interested in the latest fashions, let us send you our color cards.

Other Lowe Brothers Products are Varnish, Stain, Enamel, Floor Paint—just the right thing for every requirement. Write for Free Book let—"Attractive Homes and How to Make Them."

"The Little Blue Flag"

—Your Protection

THE LOWE BROTHERS COMPANY
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Cut Down Your Ice Bills

You buy a refrigerator once in a lifetime—you buy ice every day. The walls of McCray Refrigerators are scientifically built so that they will keep the cold air in and the hot air out. They therefore use much less ice than others, and soon pay for themselves, besides keeping all provisions pure and in fresh condition.

McCray Refrigerators

are thoroughly insulated with mineral wool, the best insulating material known, and have the McCray Patent System of Refrigeration which insures a perfect circulation of pure, dry, cold air. They are lined with White Opal Glass, Porcelain Tile, White Enamel or Odorless White Wood, and are the cleanest, sweetest, driest, most sanitary refrigerators made. No zinc is ever used in their construction, as zinc forms oxides that poison milk and other food and is very dangerous.

Let us tell you how easy it is to have a McCray arranged to be iced from the outside, thus keeping the iceman out of the house.

McCray Refrigerators are made in all sizes, ready for immediate shipment, and are Built-to-Order for all purposes. Every refrigerator is positively guaranteed to give lasting satisfaction.

Send Us This Coupon

and let us send you free our 40 page illustrated catalog that explains why McCray Refrigerators are superior to other refrigerators and different from ordinary ice boxes. Send us the coupon now.

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694 Mill Street,
Kendallville, Ind.

Branches in all principal cities.

McCray Refrigerator Company,
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Gentlemen:—Please send me your free Catalog of McCray Refrigerators.

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Street.....
City.....State.....

The Only SAFE Refrigerator to Use

THE HEALTH of yourself and family is in danger if you use any other refrigerator than The Monroe.

Because The Monroe is the only solid porcelain refrigerator. It alone can be kept thoroughly, spotlessly, germless, clean.

All other refrigerators have cracks and corners which cannot be cleaned by any means at the housewife's disposal. Here spilled milk, gravies and particles of food collect and breed germs by the million. These germs get into your food and make it poison, and the family has summer complaint or stomach troubles from no traceable cause.

The Monroe Refrigerator alone has no cracks or sharp corners. The interior is made of one piece of seamless porcelain ware an inch thick (construction patented) with every corner rounded. The Monroe can be sterilized and rendered germlessly clean in

every part in an instant by simply wiping it out with a cloth wrung from hot water. This is true of no other refrigerator in the world.

This is why The Monroe is installed in the best flats and apartments, occupied by people who care—and why The Monroe is found today in a large majority of the very best homes in the United States.

And it's why you should have The Monroe in your home—for the sake of knowing your food is clean, and to protect the family's health at the same time. So, in your own interest, read carefully our liberal offer below:

The "Monroe"

Is Sent to You, Anywhere, on
60 DAYS' FREE TRIAL

Lowest Factory Prices. We Pay the Freight.

Write today for The Monroe Catalog. Pick out the size and style refrigerator you wish to try, at the same time convince us in your own way that you are entitled to enjoy our trust and confidence and we'll send it to you at once, all freight prepaid. You'll not be under any obligation to keep it unless you want to. When the refrigerator comes, use it and test it in your own home for 60 days and prove to yourself in your own way that The Monroe is all and more than we claim. Then decide whether you wish to keep it or not. Remember, all the risk and expense is ours, not yours. We could not afford to make this liberal offer unless we knew positively that you'd find every claim true and would keep The Monroe after the trial was over.

MONROE REFRIGERATOR CO., Station 3, Cincinnati, Ohio



NOTE

You cannot buy a Monroe Refrigerator or anything like it from any dealer or agent. We sell direct to you, and to you we are directly responsible. Send us your name and address today.



Period lighting fixtures from classic to modern.

Every detail carefully developed in a most complete line for your inspection.

Architects' designs carefully executed. Sketches submitted on request.



Reading Hardware Co.
Manufacturers,
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should be appropriate to its use. The simple fence here shown is well suited for the small suburban place.

We make fences for every purpose—Iron Railings—Entrance Gates—Wire and Iron Fences for Lawns, Gardens, Stock Paddocks, Poultry Runs, Dog Kennels, etc.

We also design and build a great variety of Iron Arbors for vines and fruit trees, Arches, Plant Supports, Tree Guards, etc.

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New Cooking Range New Warm Air Distributors
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Write to-day for further information and estimates

Hotels and Institutions receive special attention

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Philadelphia, Pa.

screen, three panels lightly hinged. It may be covered in Japanese grass-cloth or bits of quaintly figured brocades, edged about with gold galloon,—the character and furnishing of the room to determine the choice. Where simple lines, plain colors and mission furniture are used,—the Japanese grass-cloth screen is best. If a small table wears a cover of brocade trimmed with the galloon, the effect of using the same in the little screen is attractive.

Where a window seat, *chaise-longue*, or davenport holds many pillows, the coloring of the covers of these should be most carefully selected. If a figured wall-paper is used in the room, these materials should all be in plain or two-toned color effects. To reproduce the colors shown in the rug of the room is an acceptable scheme.

In this day of shaded lights, no room is complete without its lamp-shades or candle-shades. These may be made of thin soft silk fluted on the large wire frames, which may be purchased for seventy-five cents. A tiny moss fringe should trim the lower and upper edges. A shade of this kind can be constructed at home at very little expense. Also attractive shades may be made from the Dresden silks, showing tiny baskets of flowers in colors on white or cream ground. The silk is stretched smoothly on the frame, and all joinings are covered by dainty gold lace not more than one-half inch in width. There are no more beautiful shades made than those of vellum hand painted. The soft ivory of the vellum makes a particularly effective background for the decoration of Empire or Louis XVI. design.

Quaint bits of brass in book racks, candlesticks, candelabra, jars, and boxes, may be picked up in some of the small Russian shops that are finding their way into all of the great cities. These cost very little and are most decorative.

Where correspondents write to this department in regard to such detail in furnishing, if they will send a bit of the wall-paper used in the room to be considered, or at least a complete color description of the same, we will be able to help them practically.

CORRESPONDENCE

TO RENDER OLD FLOORS SERVICEABLE

I live in an old Southern house, the floors of which have for many years been covered. As I am particularly anxious to do away with carpets and mattings, I would ask that you suggest some treatment for floors of soft pine, which will make them possible. Also will you advise me in regard to the best covering for a three leaf screen I wish to use in my dining-room, the walls of which are covered with a large figured two-toned green paper. The ceiling is white, the woodwork and furniture of walnut.

Answer: We will send you by mail a formula for mixing paint with which to treat your soft wood floors. Select a Vandyke brown oil paint, and by adding the floor finish of which I send you the name, you will have a surface for your floor which is much better than can be secured by ordinary painting. The cracks of the floor should be thoroughly filled with a crack filler, formula for which we will mail to you. Three coats of paint should be given. Cover the three panels of your screen with a gold fabric paper: this resembles gold burlap. There is a frieze now made which shows the tops of pine trees against a light sky line, the lower edge of which is finished by irregular rows of pine cones in gold and brown. This frieze can be applied to the top of the panel of the screen. Cut out the lower edge so that the pine cones will be applied directly to the gold paper. Mounted on burlap or canvas this will give you a screen covering at slight cost which will wear almost as well as leather. It will be particularly effective in your dining-room with the dark wood and green walls.

CURTAINS SUITABLE FOR A COTTAGE IN THE COUNTRY

My home is in the country all the year round. Our means are very modest and I am particularly fond of beautiful things. As the views from my windows are all that one could desire, I must content myself with simple but harmonious surroundings within doors in my home. My dining-room is papered with a cartridge paper in shade of yellow-tan. The sitting-room, which opens out of it and is of southern exposure, has dull blue for its wall covering. The woodwork in these two rooms

CRYSTAL Domino SUGAR

5 lb Sealed Boxes Only! • Best Sugar for Tea and Coffee! • By Grocers Everywhere!

The Finishing Touch to the Attractiveness of Your Home is the Decoration of the Walls

You can make an old house as bright, cheerful and attractive as it was when new, by decorating your walls artistically with Alabastine.

When the house is new, and the woodwork fresh and clean, you can keep it absolutely sanitary by decorating with Alabastine.

The dainty Alabastine tints make the most pleasing background for pictures, furnishings and furniture, and enable you to have the entire house finished in one complete color scheme so that one room blends into the next. All of the rooms will be brighter, more cheerful, more artistic. The cost will be less, and your satisfaction greater. Any one can easily apply Alabastine by simply following directions on the package.



Alabastine The Sanitary Wall Coating

becomes a part of the wall itself. One tint can be applied over another as often as desired without the bother or expense necessary where old wall-paper or kalsomine has to be first washed or scraped from the walls. This cuts the cost of decorating in half. Alabastine decorations will last longer, for Alabastine neither fades, rubs off nor scales.

Many of the beautiful color effects that can be produced with Alabastine are shown in detail in the book "Dainty Wall Decorations," which contains complete color plans for any home. This book will be sent you postpaid for 10c in coin or U. S. stamps. It is worth far more to anyone intending to decorate. Tint cards mailed free on request.

Ask your dealer for Alabastine and insist upon having Alabastine

Alabastine is sold in carefully sealed and properly labeled packages at 50c for white and 55c for tints, by all Paint, Drug, Hardware and General Stores. See that the name "Alabastine" is on each package before it is opened, either by yourself or the painter. If your dealer does not sell Alabastine, write us.

The Alabastine Company

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Eastern Office, Dept V, 195 Water Street, New York City.





DOOR-YARD POSSIBILITIES

BY the proper selection and arrangement of Shrubs, Plants and Vines, the most modest home may be made attractive and inviting. If you hesitate because you've had no experience in this work, while wishing something might be done about your place, without extravagance, write to me. I'LL HELP YOU.

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ORCHIDS

CATALOGUE ON REQUEST

Flowering Plants and Orchids always in stock.

Visitors always welcome.



PEACHES! We offer you 1 Elberta Peach Tree, 1 Red Cross Currant Bush, 1 C. A. Green New White Grape Vine, and 2 Live-For-Ever Rose Bushes, all delivered to your house by mail for 25 cents, or two of these collections for 50 cents, or four of these collections for \$1.00. (Capital \$100,000.00.)

Send for free Fruit Catalogue, and a copy of Green's Fruit Magazine. Established 30 years. Five Nursery Farms.

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affords you the latest and most up-to-date knowledge to be had on the subject of Rose growing. It is larger, handsomer and more valuable than ever. Many pages illustrated in color. Describes over a thousand distinct varieties of Roses that we now have in stock—all on their own roots—all strong, hardy plants. Tells how to grow Roses successfully and all other desirable flowers. Contains select lists of flower and vegetable seeds. Mailed free to all who write for it.

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The 1908 "Dingee Collection" is offered to those who consider quality rather than numbers. It comprises ten strong, hardy Rose plants, all on their own roots, all different, all labelled and true to name, including the wonderful Tausend-schön (Rose of a Thousand Beauties), La France, Killarney, Helen Gould, The Cochet—sent postpaid anywhere for \$1.00. Guaranteed to reach you safely and to grow and bloom. The greatest collection ever offered. Orders booked for delivery when wanted. A dollar bill will bring them. Now is the time to order.

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THE STANLEY WORKS

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is very ugly, being of pine finished with hard oil. This I wish to remedy. Also I would like a suggestion for curtaining the windows of these rooms. The windows are narrow and of ordinary sliding sash design. I do not like lace curtains.

Answer: It would be a very easy matter to improve the woodwork in your two rooms. Cleanse these with a varnish remover to take off all of the oil in the present finish. When the wood has thoroughly dried apply three coats of white lead, followed by two coats of enamel in a shade of ivory white. This will give you a beautiful smooth finish and one which will be lasting.

The color combination of dull blue and soft yellow is very good, and we are glad to know that you are opposed to lace curtains. Since your windows are narrow in effect, we would suggest that you set rods at the top of the frame, extending about three inches on either side of the wood trim. From this extension, and covering the wood trim, hang curtains of domestic linen taffeta, these to extend only to the sill. In your blue room select a taffeta in a shade of tan with dull blue figures. For the dining-room use plain blue, the color of the walls in the sitting-room. Next the glass hang straight curtains of figured white batiste. The figure should be small and the batiste very sheer in quality.

This does not necessarily mean that it will be an expensive quality, as the coarser weaves are most effective and launder better for curtains. I am sending you samples of this domestic linen taffeta and the batiste. The price of the taffeta is seventy-five cents a yard, fifty inches wide; the batiste varies in price from thirty cents to sixty cents a yard, thirty-six inches wide.

DECORATIVE LOOSE BINDINGS FOR BOOKS

"New England," "A Book Lover," and "A Reader," have all asked about decorative loose bindings for books and illuminated monograms to be used on them. These can be obtained in many of the leading shops, but where special designs and something distinctly personal is desired, they can be made to order. The illustrations given show some of the designs, which are particularly effective. If we are supplied

House and Garden

with a self-addressed envelope, we will be pleased to forward the addresses of parties from whom estimates on this work may be obtained.



A Binding with Thumb Index



A Binding Showing Monogram

Mrs. L., of Boston, a Southern Woman, a Subscriber, and an Interested Reader, will all find reply to their questions embodied in The Editor's Talks for the current month.



No. 2154

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ONLY.

Solving the Greenhouse Question



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SEEDLESS TOMATOES

THE Agricultural Department in a recent bulletin compiles reports from New Jersey and Wisconsin concerning the production of seedless tomatoes.

The production of any vegetable novelty always arouses interest among seed growers and gardeners. More or less of this work has been done by the experiment stations. For a number of years breeding experiments with vegetables have been carried on by Prof. Halsted and his associates at the New Jersey stations. Among the distinct and valuable productions secured in this work is a nearly seedless tomato. As is well known, each fruit of the ordinary tomato contains hundreds of seeds, while the form which Prof. Halsted has developed seldom contains more than fifty seeds and frequently there are not more than five or six and often none.

This variety has become pretty well established now and has been called the Giant because of the very large size that the plant attains. It originated five or six years ago as a result of a cross of Golden Sunrise upon Dwarf Champion.

"The seedlings frequently bear three cotyledons, and the plants are very slow, growing long stemmed, with the foliage open, due to the long internodes, and leaves with the divisions widely separated, which are crinkled, and the terminal leaflet blunt pointed. The flower clusters are small, flowers cup shaped, light lemon yellow, and the fruits few, medium small, light yellow and nearly seedless. The flesh is particularly fine flavored. The plants, three feet apart each way, covered the ground devoted to the block, and flowered up to the killing frosts near November 1."

The type appears to be well fixed. Attempts to cross others upon it have failed.

Seedless fruits have also been produced by Prof. Halsted on several varieties and crosses of tomatoes, due probably primarily to nonpollination with other conditions favorable to the stimulation of fruit production. These crosses were quite uniformly dwarfed in size, many in a cluster being not larger than peas, but solid fleshed and often of good quality. In one instance the fruit had the flavor of the strawberry. Currant crossed upon Stone produced such fruit, likewise Crimson Cushion upon Sumatra. When Crimson Cushion

(Continued on page 24.)

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was crossed upon Giant and Magnus many seedless fruits were produced, some of which were large enough for table use. Cuttings taken from plants which produced numerous seedless fruits of this sort when planted out in the garden gave only normal fruits.

E. P. Sandsten, working at the Wisconsin station, produced seedless tomatoes by an entirely different method, i. e., the use of excessive amounts of fertilizers. He worked the greenhouse with a good potting soil, using commercial fertilizers at the rate of 800 pounds of nitrate of soda, 600 pounds of sulphate of potash and 1,000 pounds of desiccated bone per acre. Many abnormalities in the growth of the plants and fruit were observed. "In almost all cases there was a tendency of the plants to produce fruits containing a much smaller number of seeds than generally found in the ordinary fruit."

We thus have at least two ways of securing seedlessness in tomatoes—by crossing and selection and by high feeding with fertilizers. The work with seedless tomatoes at both these stations is being continued and promises to result in the establishment of varieties with far less seeds in than the sorts commonly grown. It brings out strikingly the variations that may occur in plants as a result of crossing and high feeding with fertilizers.—*Farm and Home*.

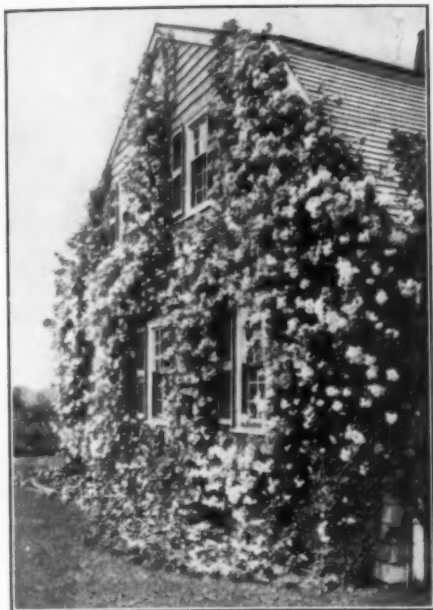
A NEW ROSE OF SURPASSING BEAUTY

CLIMBING roses have ever been popular in city and country, and during June and July the gorgeous crimson of the "Ramblers" may be seen everywhere in all its glory.

The present season brings us a new rose of surpassing beauty, without question the most sensational climbing rose yet introduced—not even excepting the crimson Rambler. Its name is the "Tausendschön" (Thousand Beauties).

Imagine if you can, a rose producing on the same bush so many different colored flowers that it is impossible to describe or even picture the variations. A single cluster of flowers is a bouquet in itself, hence the very fitting name, "Thousand Beauties." Blooming profusely from the beginning of June until the last of July, the flowers appear in large clusters, ten to fifteen in a cluster, are of splendid size and quite double.

The colors run from delicate balsam or tender rose through the intermediate shades of bright rose and carmine, with white, yellow and various other indescribable tints showing. There is no



The Thousand Beauties Rose

other rose in cultivation like it. It is a strong grower, with but few thorns, magnificent foliage, impervious against mildew and absolutely hardy in the open ground everywhere. It has created a veritable sensation, and has been awarded numerous medals. For climbing over porches, bowers, pergolas or trellises, or for single specimens or pyramids, it will please you from the day you plant it. We pronounce it the most remarkable rose of its kind in the world.

Those interested may obtain full information about this sensational rose by writing to the Dingee & Conard Co., West Grove, Pa., for particulars, or by asking for their rose catalogue, the "New Guide to Rose Culture for 1908."

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WE often hear it said: "I love the maidenhair fern, but I cannot do anything with it." To those disappointed ones I want to say: "You can, for I have, and for at least twenty years I have had magnificent specimens, the delight and admiration of my friends."

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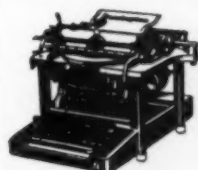
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have at least one-half woods earth or leaf mold, with a good sprinkling of sand mixed in and no manure. Have at least two inches of charcoal or broken crock in the bottom of the pot, with a little moss or fibre to keep the soil from washing out.

"This gives perfect drainage, which is essential. Do not allow it to dry out, but water freely. The pot can be raised slightly by putting something in the bottom of jardiniere or saucer, thereby keeping the vent in bottom of pot open, allowing surplus water to run off freely, though I doubt if standing in water would do harm. That, however, is a theory. A north or east window is best. I give what morning sun they can get, and fresh air often. This is another essential, but avoid drafts. A dish of water on the stove or heater gives a little moisture, which they need, and I have found a low stand near the floor works admirably, giving them the coolest, purest air in the room, and the chance to 'look up' toward the light, as they do naturally in their native or wild state, but not so low as to preclude a good, strong light, and a morning kiss from the sun."—*Farm and Home.*

ALGERIAN MOSQUES

OF the more than one hundred mosques which formerly existed in the city of Algiers, only five now remain. The most interesting of these are Djamaa el-Kebir, the grand mosque, in Rue de la Marine, Djamaa el-Djedid, or the Fisher Place mosque, also in the Rue de la Marine, and the enchanting little mosque of Djamaa Sidi Rhaman, overlooking the garden of Marengo, and taking its name from the marabout, or Mahometan priest of most venerated memory, Sidi Abd-el-Rhaman, who died in 1471 and is interred here within an inner sacred chapel or khouba, surrounded by several pachas and deys. Two distinct and zealous sects, the Maleki rite and the Hanefi rite, worship respectively at the Grand mosque and the Fisher Place mosque; while at the Sidi mosque all are on common ground; it is the shrine of the more aristocratic Moslems, and on certain days of the week it is thronged with men and women, the latter, from an old and lax custom, predominating. Indeed, it is at this little mosque, if reverence is assumed and discretion exercised, that one will secure

more glimpses of Arab women of the finer type than offered by all other possible opportunities in Algiers. The Grand mosque dates from the eleventh century. From the Rue de la Marine it presents a façade of splendid white marble columns. These support an arcade, in the center of which is a tremendous fountain. Before all mosques stands the fountain, for all Moslems perform extraordinary ablutions before entering for worship. The interior, as with all mosques, is extremely plain. Stately, monumental pillars, supporting the universal Moresque arch, provide numerous series of arcades. A few inexpensive lamps are suspended from the roof. The pulpit is plain, and the attached gallery to it is of the severest pattern. A little niche, without ornamentation, is set into the wall, called the mihrab, which is found in all mosques, and indicates the east, the direction of the sacred Mecca. Matting is hung about all columns and the side walls, lest they suffer defilement at the touch of sacrilegious Christian. The one sumptuous thing to be seen is in carpeting. The floor is completely covered with the richest of old Moorish carpets. For no Moslem, and no Christian unless he have no sense of regard for cherished religious custom and tradition, will ever enter one of these edifices without first removing his sandals or shoes. The windows are invariably small, set high in the walls, colored, and the effect of the dim, subdued light and the peculiar Eastern incense, is exceedingly impressive. Under the same roof is the highest Algerian court of the Algerian Mussulmans, the superior tribunal of the muf-ti, to which appeals are frequently taken from the lower court of the cadi; for it has been the wise policy of the French provincial rule in Algeria to foster and preserve all Mohammedan customs, religion and institutions, not positively inimical to French civil law.—*Commercial Advertiser*.

THE WATCH AS A COMPASS

A FEW days ago I was standing by an American gentleman, when I expressed a wish to know which point was the north. He at once pulled out his watch, looked at it and pointed to the north. I asked him whether he had a compass attached to his watch. "All watches," he replied, "are compasses."



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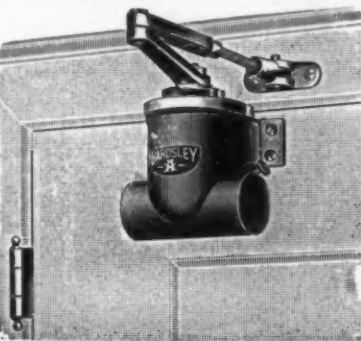
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FACTORS:

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Then he explained to me how this was. Point the hour-hand to the sun, and south is exactly half-way between the hour and the figure XII on the watch. For instance, suppose that it is four o'clock. Point the hand indicating four to the sun and II on the watch is exactly south. Suppose that it is eight o'clock, point the hand indicating eight to the sun, and the figure X on the watch is due south. My American friend was quite surprised that I did not know this. Thinking that very possibly I was ignorant of a thing that every one else knew, and happening to meet Mr. Stanley, I asked that eminent traveller whether he was aware of this simple mode of discovering the points of the compass. He said that he had never heard of it. I presume, therefore, that the world is in the same state of ignorance. Amalfi is proud of having been the home of the inventor of the compass. I do not know what town boasts of my American friend as a citizen. — *Labour-chere in London Truth*.

BAYBERRY CANDLES FOR GIFTS

BAYBERRY candles as Christmas gifts to numerous friends was the happy thought of a young woman who had been able to gather plenty of the wax during her summer vacation. The fragrant berries impart a faint aromatic odor to the wax that is delightfully reminiscent of olden times, and lends a decided charm to the delicate green candles.

A pair, or several of the candles in their Christmas wrappings of tissue paper, holly and red ribbons, makes a very pretty and acceptable gift. With the accompanying card attached to the ribbon, a sentiment or verse may be written as: "Let me light a candle of love in your heart that will never burn out." "Thy modesty's a candle to thy merit." These candles are supposed to bring good luck if burned before the end of the year.

The picking of the bay or candle-berries is very pleasant work. As the young woman referred to was spending her vacation in the country, stopping at a hotel, she could not make her candles there, but simply gathered the wax. She placed the berries in a kettle with plenty of water and kept them boiling fast. As the wax rose to the surface she skimmed it off and threw it into a small

pail of hot water and when this cooled, it left the wax in a compact cake on top.

When taken home these cakes were melted and run into ordinary candle molds. These bayberry candles give a steady flame, a pleasing fragrance and burn much more slowly than ordinary candles. If only used on special occasions they will last a long time.

Old-time silver candlestick holders make a suitable setting for bayberry candles, or if you do not possess any of these heirlooms, try something unique. The prettiest and most attractive kind of a holder may be made with rosy cheeked apples. They should be of uniform size and a hole hollowed out to set the candle in, so it will stand firm. Place a wreath of holly around it on the white cover.—*Farm and Home.*

ROSES

PLANTED too close to a porch or dwelling, especially in a partial shade, and without free circulation of air, roses are likely to be attacked by mildew. A sudden drop in the temperature, especially after a humid season, subjects roses to subsequent mildew as quickly as the same cause does with indoor roses. For outdoor roses under an attack of mildew syringe thoroughly both canes and foliage with the following: One pound hard soap, one-half pound of flour of sulphur, ten gallons of water. Dissolve the soap in boiling water, stir in the sulphur, then add cold water sufficient for ten gallons. Keep constantly stirred while using. This is a perfect cure and far surpasses the method of dusting with sulphur. The latter answers for light attacks and is applied when the plant is thoroughly wet with dew or water.

PAY OF THE GRECIAN ARCHITECT

IN 1897 the French school at Delphi unearthed two slabs of limestone which bear an inscription which is of great interest, dating, as it does, from the fourth century before Christ. This inscription, which consists of about two hundred lines, gives the price of work for building operations in Greece at the period named, and from it we learn that an architect was paid at the rate of under £30 per annum. This is not a great sum, even if its purchasing power is multiplied, as it should be, by five or six.—*Chambers's Journal.*

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A GREAT FRENCH ETCHER

CHARLES MERYON—born in 1821—was brought up to the navy, going first in 1837 to the Naval School at Brest. As a youth, he sailed round the world. He touched at Athens; touched at the then savage coasts of New Zealand; made sketches, a few of which, in days when his greater work was most of it done, he used as material for some of his etchings. Art even then occupied him, and, deeply interested as he soon got to be in it, he seems to have had a notion that it was less dignified than the profession of the navy, and after a while he chose deliberately the less dignified—because it was the less dignified. He would have us believe so, at any rate; he wished his father to believe so. And in 1845, having served creditably, and become a lieutenant, he resigned his commission. A painter he could not be. The gods, who had given him even in his youth a poetic vision and a firmness of hand, had denied him the true sight of color; and I remember seeing hanging up in the *salon* of M. Burty, who knew him, a large impressive pastel of a ship cleaving her way through wide, deep waters, and the sea was red and the sunset-sky was green for Meryon was color-blind. He would have to be an engraver. He entered the workroom of one M. Bléry, to whom, in after times, as his wont was, he engraved some verses of his writing—appreciative verses, sincere and unfinished—“*à toi, Bléry, mon maître.*” The etchings of Zeeman gave him the desire to etch. He copied with freedom and interest several of Zeeman’s neat little plates, and addressed him with praises, on another little copper, like the one to Bléry—“to Zeeman, *peintre des matelots.*”—*Pall Mall*.

ACETYLENE GAS AND PLANT LIFE

ONE of the advantages now claimed for acetylene gas is that the products of its combustion are not at all injurious to plant or animal life as is the case with coal-gas. A test was recently made with acetylene in a greenhouse, and absolutely no effect was produced, whereas the coal-gas worked a distinct and readily seen injury to the growing plants. On this account, the new gas is recommended to photographers for their dark-rooms which do not have the best of ventilation.—*N. Y. Evening Post*.



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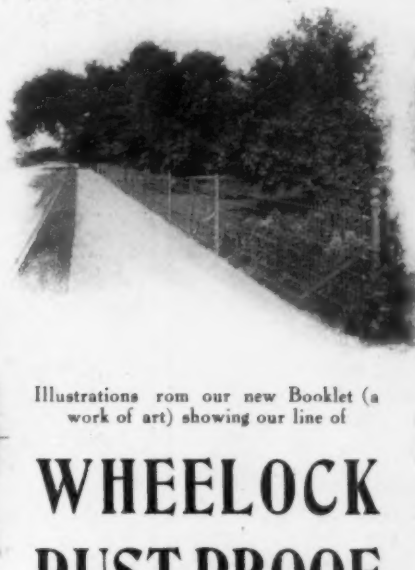
AN interesting instance of the diversified uses of which the phonograph is capable is afforded in a recent experience by the Knowles Steam Pump Works, of New York City. The company had put up one of its large pumps for the Ricks Water Company at its pumping station at Elk River, Cal. After several years of use something evidently went wrong with the pump, and in a letter of advice to the works regarding the trouble, which took the form of a phonograph cylinder, advantage was taken of the cylinder to record the sounds of the pump in running, precisely as the stethoscope is used by the physician in examining the action of the heart or lungs of the human body. The manager of the water company spoke into the phonograph receiver, describing the symptoms of the ailing pump, and then moved the receiver so that the pulsation of the pump would be recorded on the wax roll. When the cylinder was put into the machine in New York the voice of the Californian was heard first, giving in a clear, precise and distinct way the symptoms of the pump, and then he asked the listener to pay attention to the pump's action. The experiment proved successful, and by means of the roll the disease was diagnosed. The proper remedy was suggested, and the pump is running once more, and the time and expense of sending an expert to California was saved—*Philadelphia Record*.

MALARIA BANISHED BY ARTESIAN WELLS

OUR correspondent at Lake City, Williamsburg County, reports that there are now eighteen artesian wells in the village, and adds: "Before the wells were bored the people suffered a great deal with fever and malaria, but now it is a rare thing, indeed, to hear of a case of either." This is very decided testimony to the value of pure water for the redemption of malarial districts, and Lake City's experience and example should not be lost on other places where the water is bad and health no better. There was a "great deal" of fever in the village when the wells were shallow. Now a case of it is "rare." That is sermon enough for people in other fever-haunted places.—*Charleston (S. C.) News and Courier*.



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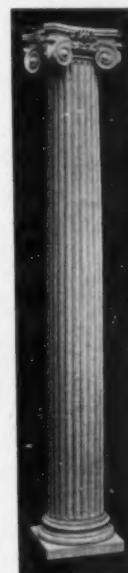
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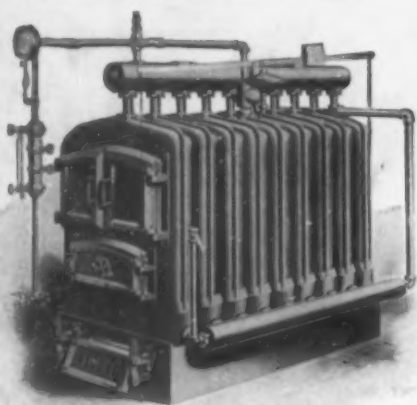
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THE railroads declare that they can employ 200,000 more men than they now have. Factories and commercial pursuits have drawn men away from the farm. The result is that in some of the older States, including New York, not only has there been a reduction in the proportion of farm labor to all labor, but there has been an actual decline in the number of men engaged in agriculture. In New York it is placed at 25,000. The National Department of Agriculture has reported in New York 12,000 abandoned farms and a lowering of land values.

This is due partly to the far Western movement, to the increased production in Canadian farm lands as well as to the attractions of the cities.

On the other hand, it is to be considered that the use of farm implements and farm machinery goes far to make up the loss in farm labor. It is said that the saving in the United States from the use of improved machinery in the cost of production of the seven chief crops amounts to 681 millions of dollars in a single year.—*Home and Farm*.

WHY ST. ANDREW UNDERSHAFT WAS SO NAMED

THERE is a church in Leadenhall Street, London, bearing the strange name of St. Andrew Undershaft. It seems that some 400 years ago, every May Day, a very high shaft or pole was set up opposite the south door of St. Andrew's and adorned with flowers. This pole was actually higher than the church steeple, which was, therefore, literally under the shaft for the time being, and led our ancestors to bestow upon the church a name which is quite unintelligible to those of their descendants who are ignorant of the history of the locality.—*Invention*.

IXIAS

THESE little bulbous flowers are regarded by some as valuable as Freesias. They are of various bright colors, and a dozen or more bulbs should be placed in a shallow, eight-inch pan of leaf-mould and sand. The plants represent a stiff, tenacious clay soil. Get and plant the bulbs as early in autumn as they can be procured, and treat them just as you would treat Freesias. Avoid over-potting.—*Park's Floral Magazine*.